


FIG. 1

EFFECT 						
	COMPOUND NAME	BREAST	BONE	UTERUS	CARDIOVASCULAR	CHOLESTEROL
	ESTRADIOL	↑	↑	↑	↑↑	↓↓
	TAMOXIFEN	↓	↑	↕	↑	↓
	RALOXIFENE	↓	↑	↓	↑	↓
	ICI 182,870	↓	↓	↓	↓	↑↑
	NAFOXIDINE		↑	↑		↓
	CLOMIPHENE		↑	↕		-
	PREMARIN	↕		↑		

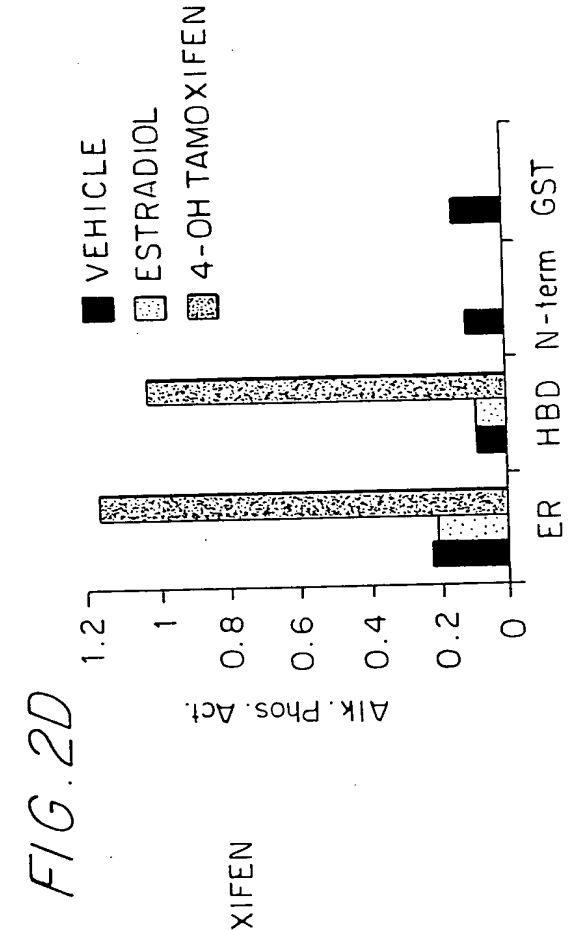
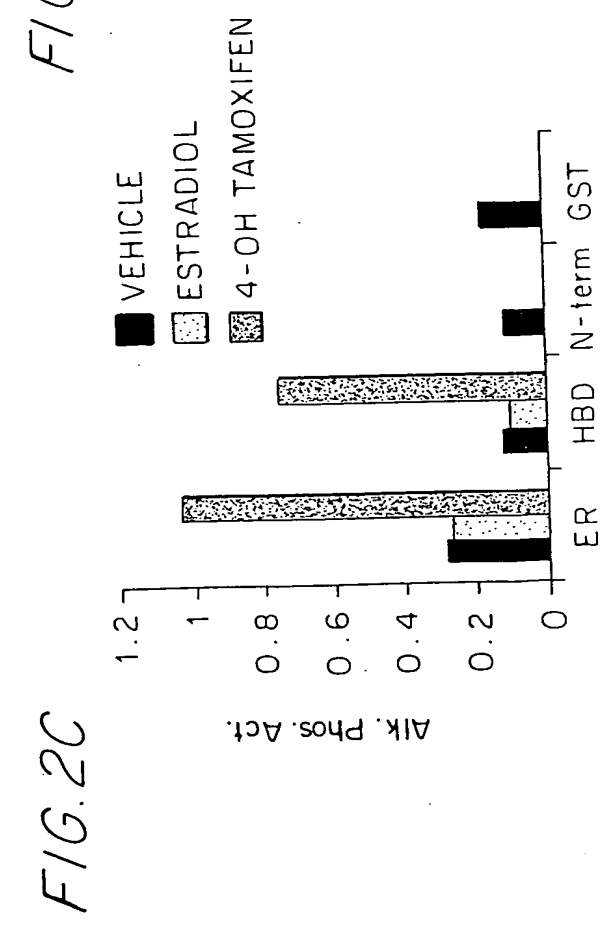
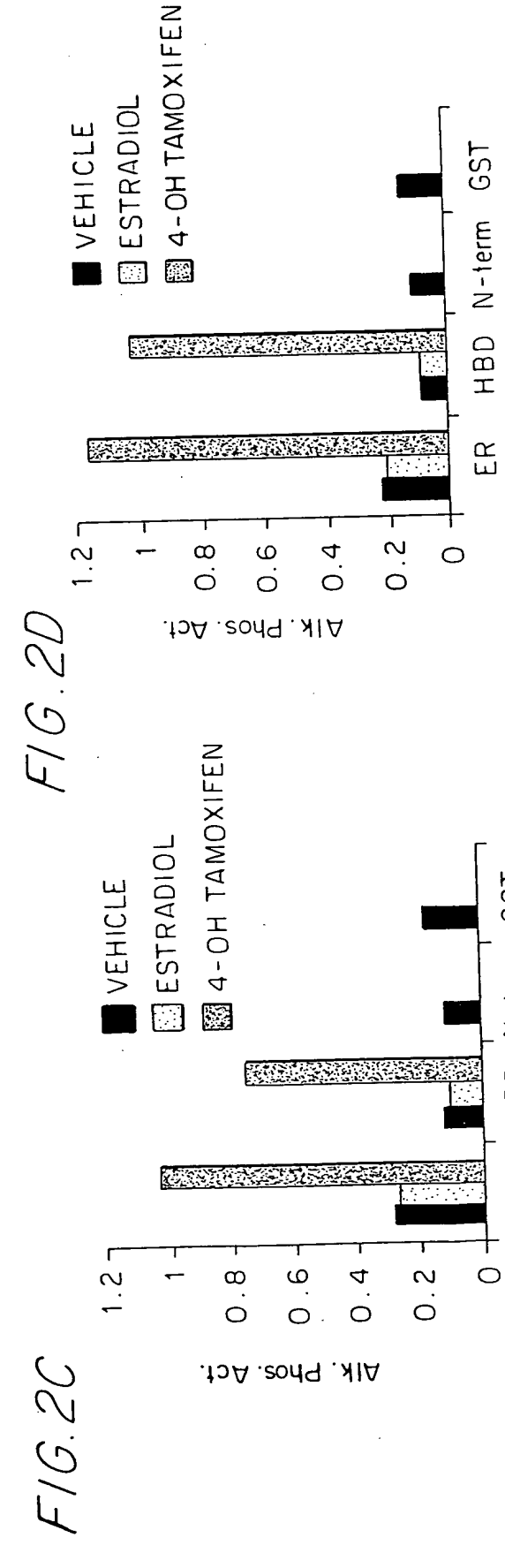
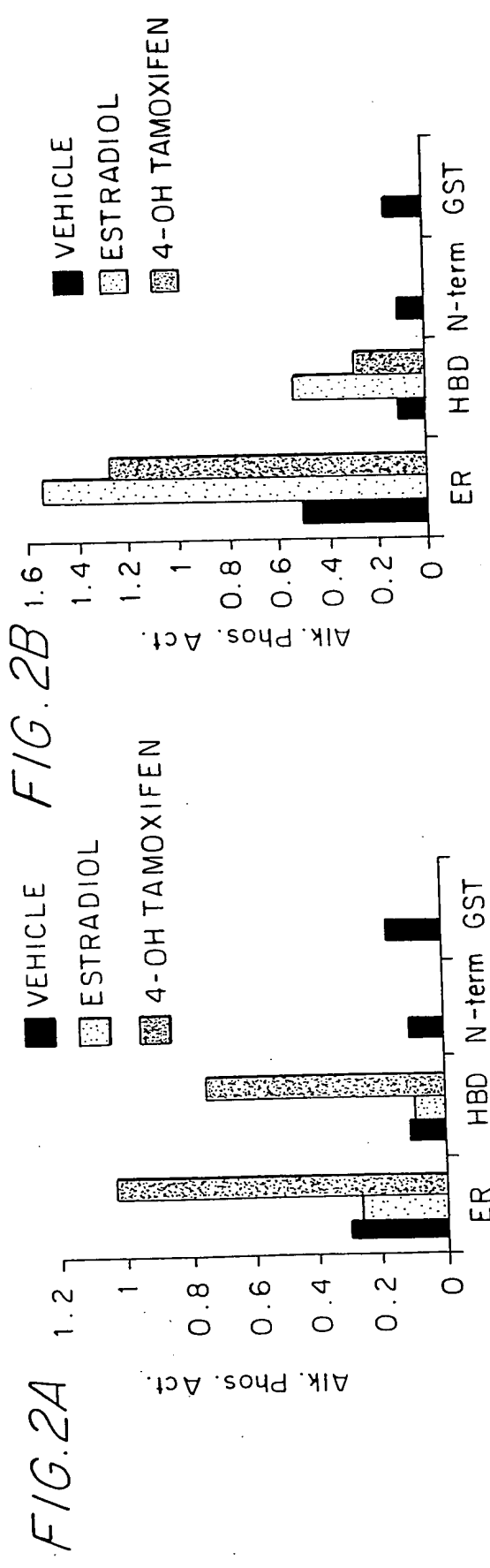


FIG. 3A

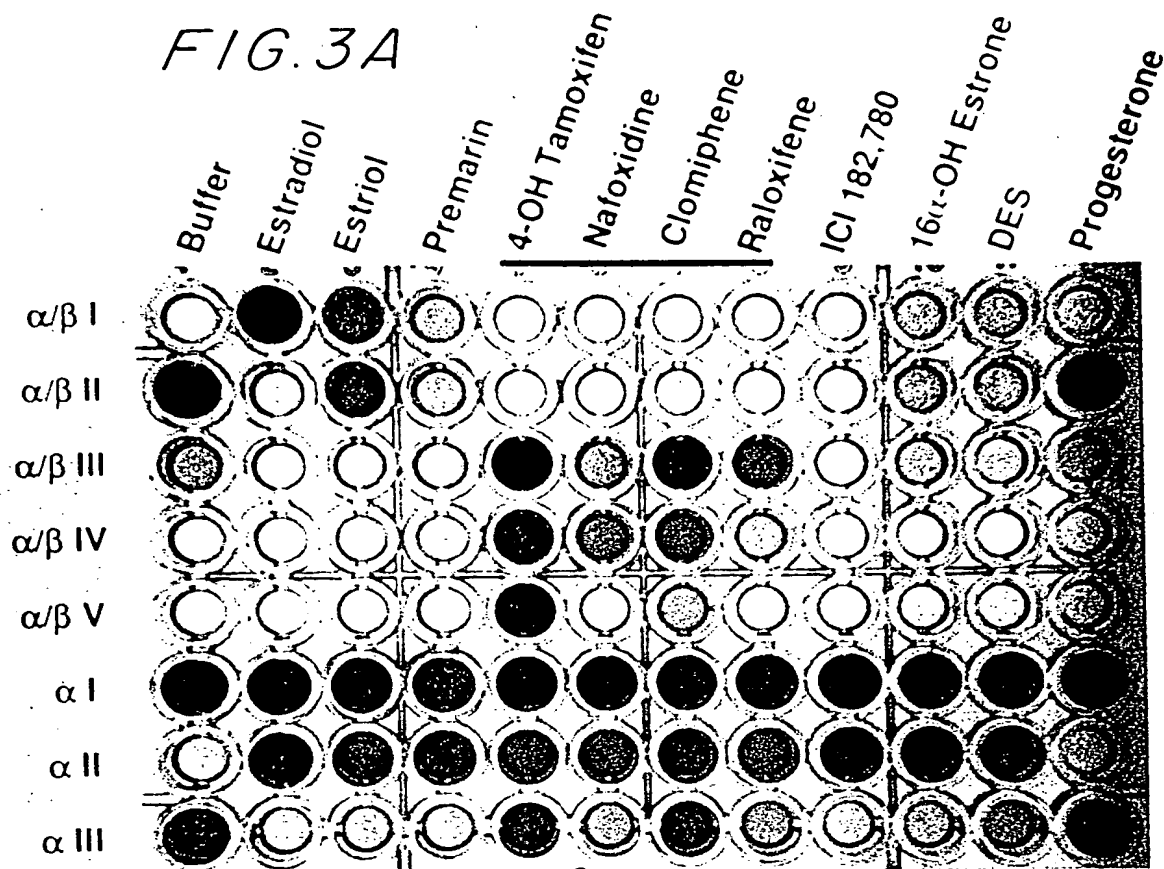


FIG. 3B

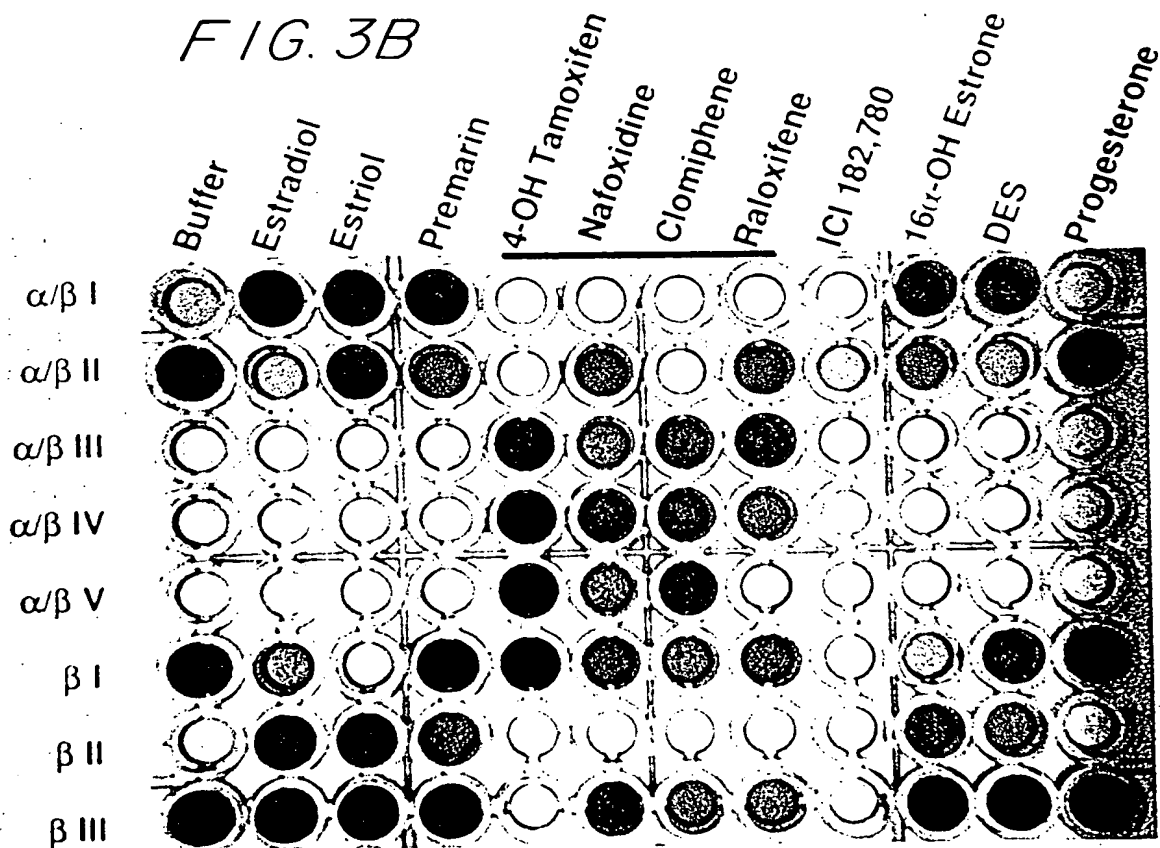


FIG. 4B

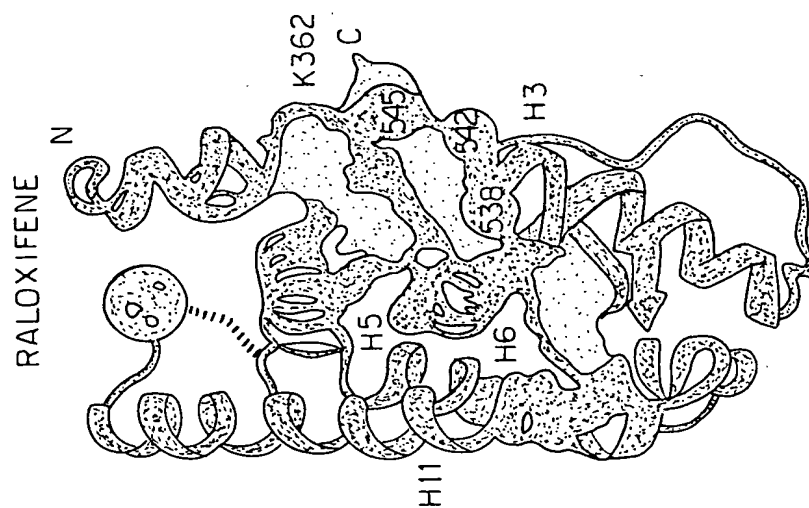


FIG. 4A

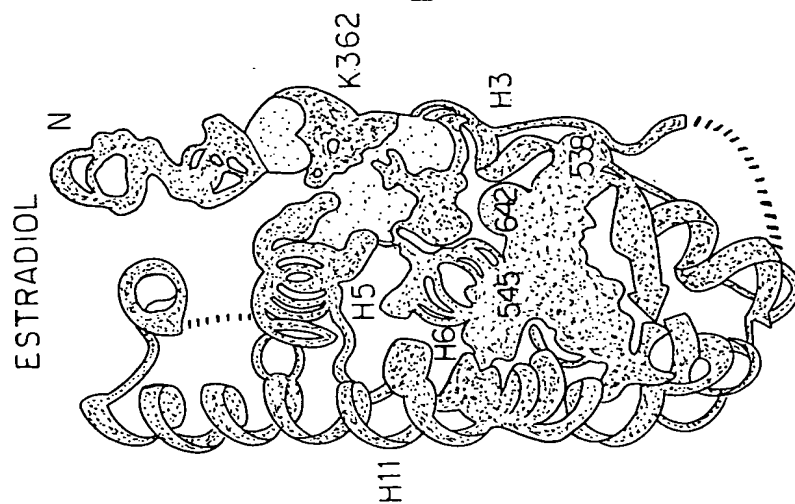


FIG. 5A

	buffer	estradiol	estriol	premarin	4-OH Tamoxifen	nafoxidene	clomiphene	raloxifene	ICI 182,780	16 $\alpha$ -OH estrone	DES	progesterone
$\alpha\beta$ I	1	6	4	2	1	1	1	1	1	2	2	1
$\alpha\beta$ II	7	2	4	2	1	1	1	1	1	2	2	6
$\alpha\beta$ III	1	1	1	2	7	4	6	4	1	2	1	2
$\alpha$ I	1	1	1	1	6	4	4	2	0	1	1	1
$\alpha$ II	1	1	1	1	1	1	2	1	1	1	1	1
$\alpha$ III	7	7	7	6	7	7	7	7	7	6	6	6
$\alpha$ VI	1	6	5	6	5	4	5	4	6	5	4	1
$\alpha$ V	5	2	2	2	6	2	5	2	2	2	3	4

FIG. 5B

	Universal Max	19.799	19.799	19.799	19.799	19.7989987	19.79899	19.79899	19.79899	19.7989987	19.8	9.79898987
Max	17.407	16.7033	15.46	15.6205	15.165751	15.748016	15.45962	15.45962	15.26433752	15.26433752	15	16.03121954
buffer	0	9.16515	6.557	7.87401	8.4852814	9.3273791	8	8	8.4261498	7.280109889	6.32	2
estradiol	9.1652	0	3	4.24264	6.9282032	8.4261498	6.324555	6.324555	5.1961524	4.358898944	4.69	8.485281374
estriol	6.5574	3	0	3.31662	6.0827625	7.8740079	5.385165	5.385165	4.472136	3.16227766	3.32	
5.916079783												
premarin	7.87	4.24264	3.317	0	4.472136	6.244998	3.464102	3.464102	2.236068	1	2.45	6.782329983
4-OH Tamoxifen	10.677	10.198	9.747	8.3666	5.4772256	2.6457513	6.480741	6.480741	9.4339811	8.306623863	8.6	9.797958971
nafoxidene	8.4853	6.9282	6.083	4.47214	0	3.8729833	2	2	5.3851648	4.123105626	4.69	7.211102551
clomiphene	9.3274	8.42615	7.874	6.245	3.8729833	0	4.358899	4.358899	7.2111026	6.164414003	6.56	8.306623863
raloxifene	8	6.32456	4.899	3.31662	2.236068	4.3588989	0	0	4.2426407	3.464101615	4.12	6.708203932
ICI 182,780	8.4261	5.19615	4.472	2.23607	5.3851648	7.2111026	4.123106	4.123106	2.449489743	2.449489743	3	7.549834435
16 $\alpha$ -OH estrone	7.2801	4.3589	3.162	1	4.1231056	6.164414	3	3	2.4494897	0	1.73	6.08276253
DES	6.3246	4.69042	3.317	2.44949	4.6904158	6.5574385	3.741657	3.741657	1.732050808	1.732050808	0	5.291502622
progesterone	2	8.48528	5.916	6.78233	7.2111026	8.3066239	6.63325	6.63325	6.08276253	6.08276253	5.29	0

# FIG. 5C

	buffer	estradiol	estriol	premarin	4-OH Tam	nafoxidene	clomiphene	raloxifene	ICI 182,780	16 $\alpha$ -OH es	DES	progesterone
buffer												
estradiol	1	0.53709	0.668799	0.602303	0.460726	0.571429	0.528896	0.595939	0.574415	0.632299	0.680562	0.898985
estriol		1	0.848477	0.785714	0.484921	0.650073	0.574415	0.680562	0.737555	0.779842	0.763098	0.571429
premarin		0.668799	1	0.832485	0.507713	0.692774	0.602303	0.728008	0.774123	0.840281	0.832485	0.701193
4-OH Tamoxifen		0.602303	0.832485	1	0.577423	0.774123	0.68458	0.825036	0.887062	0.949492	0.876282	0.657441
nafoxidene		0.460726	0.507713	0.577423	1	0.723358	0.866369	0.672673	0.523512	0.580452	0.565517	0.505128
clomiphene		0.571429	0.692774	0.774123	0.723358	1	0.804385	0.898985	0.728008	0.791752	0.763098	0.635784
raloxifene		0.528896	0.602303	0.68458	0.866369	0.804385	1	0.779842	0.635784	0.68865	0.668799	0.580452
ICI 182,780		0.595939	0.752564	0.832485	0.672673	0.887062	0.779842	1	0.785714	0.825036	0.791752	0.661185
16 $\alpha$ -OH estrone		0.574415	0.774123	0.887062	0.523512	0.728008	0.635784	0.791752	1	0.876282	0.848477	0.618676
DES		0.632299	0.840281	0.949492	0.580452	0.791752	0.68865	0.848477	0.876282	1	0.912518	0.692774
progesterone		0.680562	0.832485	0.876282	0.565517	0.763098	0.668799	0.811018	0.848477	0.912518	1	0.732739
		0.898985	0.701193	0.657441	0.505128	0.635784	0.580452	0.66497	0.618676	0.692774	0.732739	1

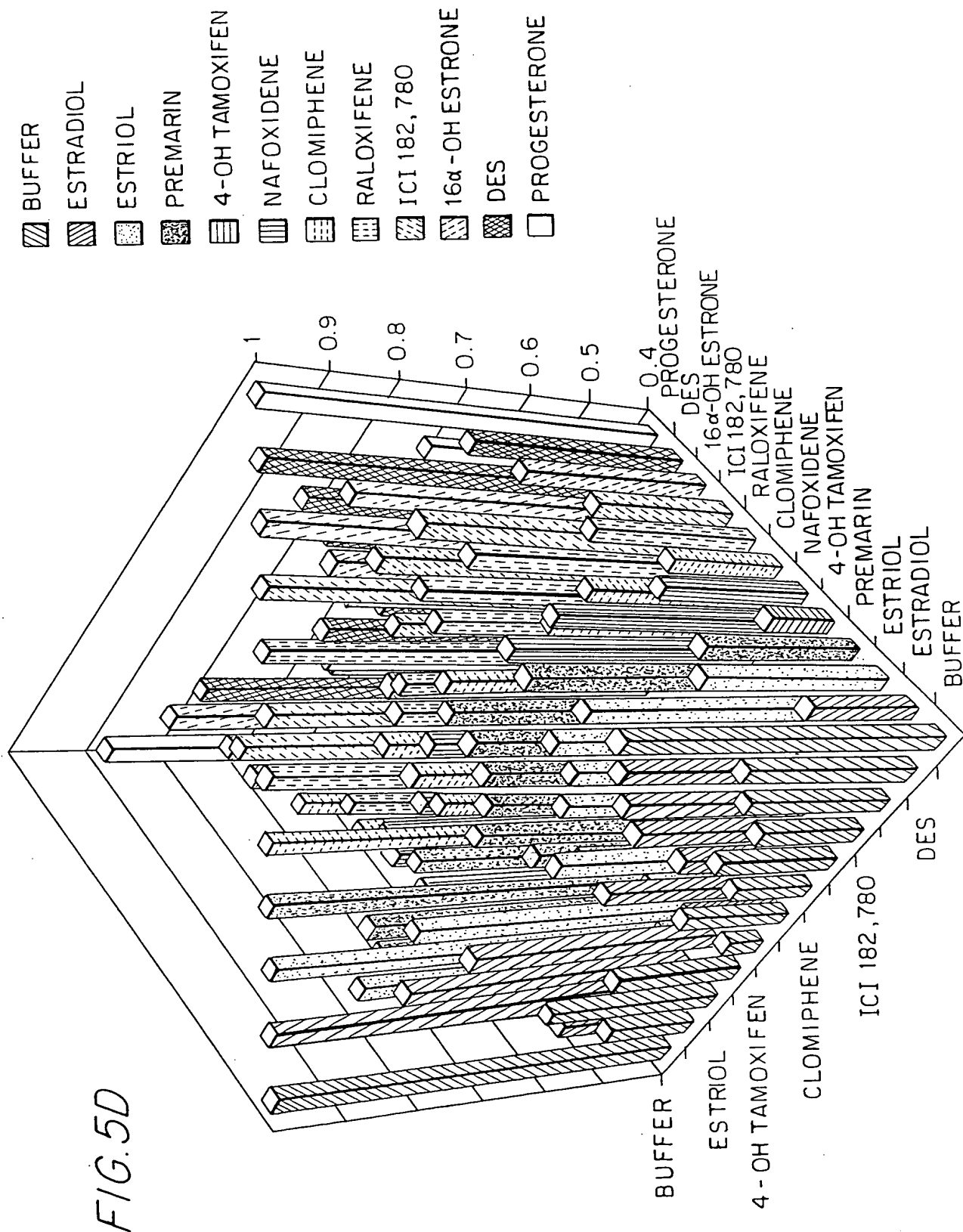


FIG. 5E

FIG. 5E

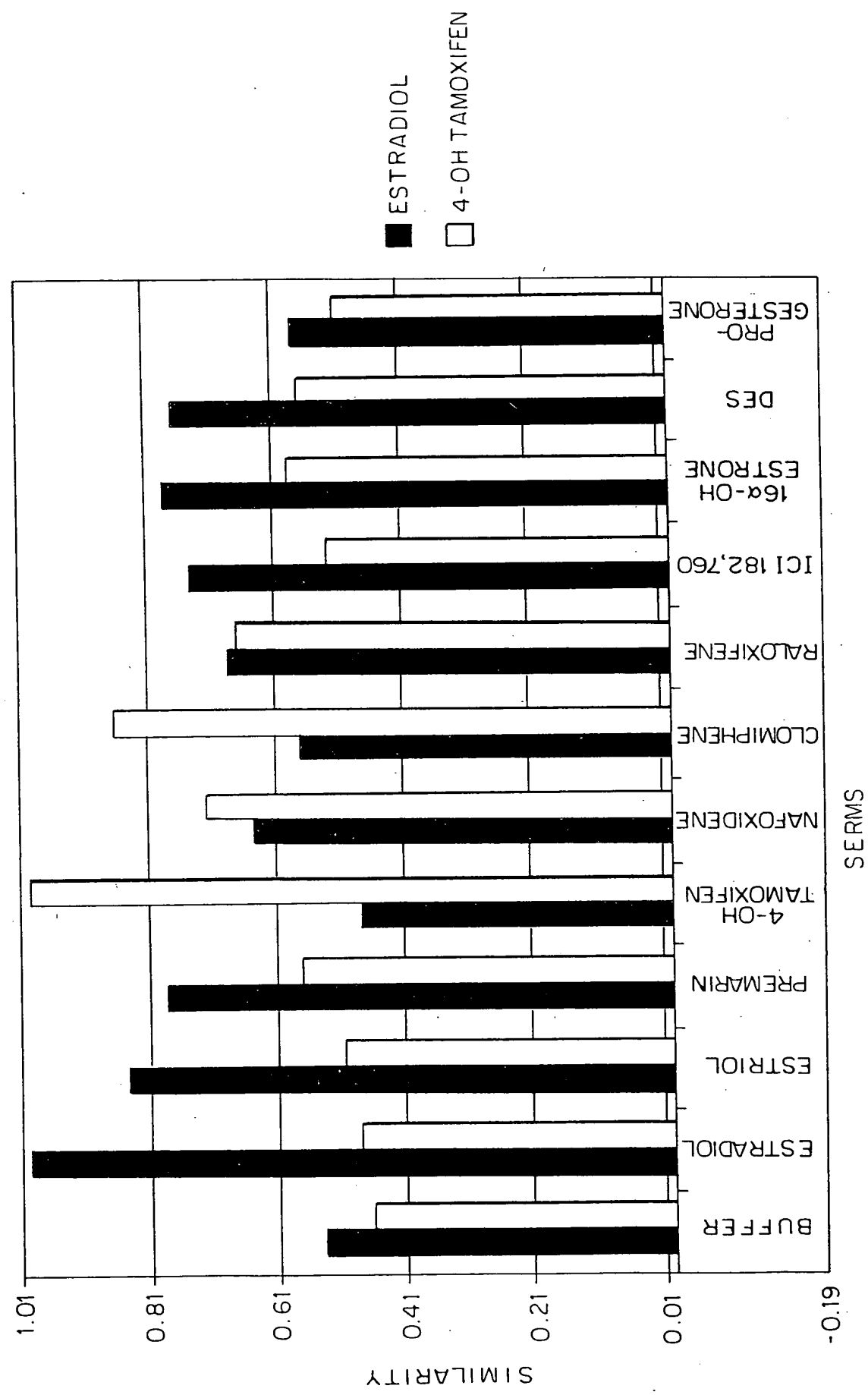




FIG. 6A

	buffer	estradiol	estriol	premarin	4-OH Tamoxifen	nafoxidene	clomiphene	raloxifene	ICI 182,780	16 $\alpha$ -OH estrone	DES	progesterone
$\alpha\beta$ I	2	7	7	6	0	1	0	0	0	5	5	1
$\alpha\beta$ II	7	2	6	4	1	4	1	4	2	3	3	6
$\alpha\beta$ III	2	1	1	1	7	3	5	6	1	1	1	1
$\beta$ I	2	1	1	1	7	5	5	4	1	1	1	1
$\beta$ II	1	1	1	1	7	3	5	2	0	1	1	1
$\beta$ III	6	3	2	7	7	4	3	4	0	2	4	5
$\beta$ VI	1	5	6	4	0	0	0	0	0	3	3	0
$\beta$ V	7	7	7	7	1	5	3	3	1	7	7	5

FIG. 6B

	Universal Max	16.76305	16.49242	16.79899	16.55295	19.13112647	14.106736	15.524175	14.93318	18.1383571	15.45962483	15.16575	16.70329309
buffer		0	8.774964	8.306624	6.082763	12.80624847	5.7445626	10	7.416198	10.2469508	6.8556546	5.91608	3.16227766
estradiol		8.774964	0	4.242641	4.690416	15.32970972	9.6953597	11.789826	11.40175	10.9544512	3.16227766	3.162278	9.219544457
estriol		8.306624	4.242641	0	5.830952	16.70329309	10.392305	13.228757	12	11.9163753	4.69041576	5.09902	9.219544457
premarin		6.082763	4.690416	5.830952	0	14.31782106	8.8317609	11.874342	10.58301	11.9163753	5.291502622	3.464102	7.280109889
4-OH Tamoxifen		12.80625	15.32971	16.70329	14.31782	0	8.4261498	5.6568542	7.549834	13.0766968	14.38749457	13.82027	12.40967365
nafoxidene		5.744563	9.69536	10.3923	8.831761	8.426149773	0	4.7958315	4	8.1240384	7.615773106	7.348469	5.385164807
clomiphene		10	11.78983	13.22876	11.87434	5.656854249	4.7958315	0	4.582576	8.42614977	10.14889157	10.14889	9.055385138
raloxifene		7.416198	11.40175	9.949874	8.774964	7.615773106	4	4.5825757	0	7.87400787	9.486832981	9.273618	6.708203932
ICI 182,780		10.24695	10.95445	11.91638	11.91638	13.07669683	8.1240384	8.4261498	7.874008	0	8.717797887	9.380832	7.681145748
16 $\alpha$ -OH estrone		6.855655	3.162278	4.690416	5.291503	14.38749457	7.6157731	10.148892	9.486833	8.71779789	0	2	6.8556546
DES		5.91608	3.162278	5.09902	3.464102	13.82027496	7.3484692	10.148892	9.273618	9.38083152	2	0	6.244997998
progesterone		3.162278	9.219544	9.219544	7.28011	12.40967365	5.3851648	9.0553851	6.708204	7.68114575	6.8556546	6.244998	0

# FIG. 6B

	buffer	estradiol	estriol	premarin	4-OH Tam	nafoxidene	clomiphene	raloxifene	ICI 182,780	16 $\alpha$ -OH es	DES	progesterone
buffer	1	0.556797	0.58042	0.692774098	0.353187	0.709856	0.494924	0.625425	0.482451	0.653737	0.701193	0.840281
estradiol	0.556797	1	0.785714	0.763098229	0.225733	0.51031	0.404524	0.424124	0.446717	0.840281	0.840281	0.534343
estriol	0.580452	0.785714	1	0.705492455	0.156356	0.475109	0.331847	0.393908	0.398132	0.763098	0.742461	0.534343
premarin	0.692774	0.763098	0.705492	1	0.276841	0.553929	0.400255	0.465478	0.398132	0.732739	0.825036	0.632299
4-OH Tamoxifen	0.353187	0.225733	0.156356	0.276840831	1	0.574415	0.714286	0.618676	0.339527	0.273322	0.301971	0.373217
nafoxidene	0.709856	0.51031	0.475109	0.553928714	0.574415	1	0.757774	0.797969	0.589674	0.615345	0.628846	0.728008
clomiphene	0.494924	0.404524	0.331847	0.400255156	0.714286	0.757774	1	0.768545	0.574415	0.487404	0.487404	0.542634
raloxifene	0.625425	0.424124	0.497455	0.55679737	0.615345	0.797969	0.768545	1	0.602303	0.520843	0.531612	0.661185
ICI 182,780	0.482451	0.446717	0.398132	0.398132159	0.339527	0.589674	0.574415	0.602303	1	0.559685	0.526196	0.612044
16 $\alpha$ -OH estrone	0.653737	0.840281	0.763098	0.732738758	0.273322	0.615345	0.487404	0.520843	0.559685	1	0.898985	0.653737
DES	0.701193	0.840281	0.742461	0.825036447	0.301971	0.628846	0.487404	0.531612	0.526196	0.898985	1	0.68458
progesterone	0.840281	0.534343	0.534343	0.632298924	0.373217	0.728008	0.542634	0.661185	0.612044	0.653737	0.68458	1

FIG. 6C

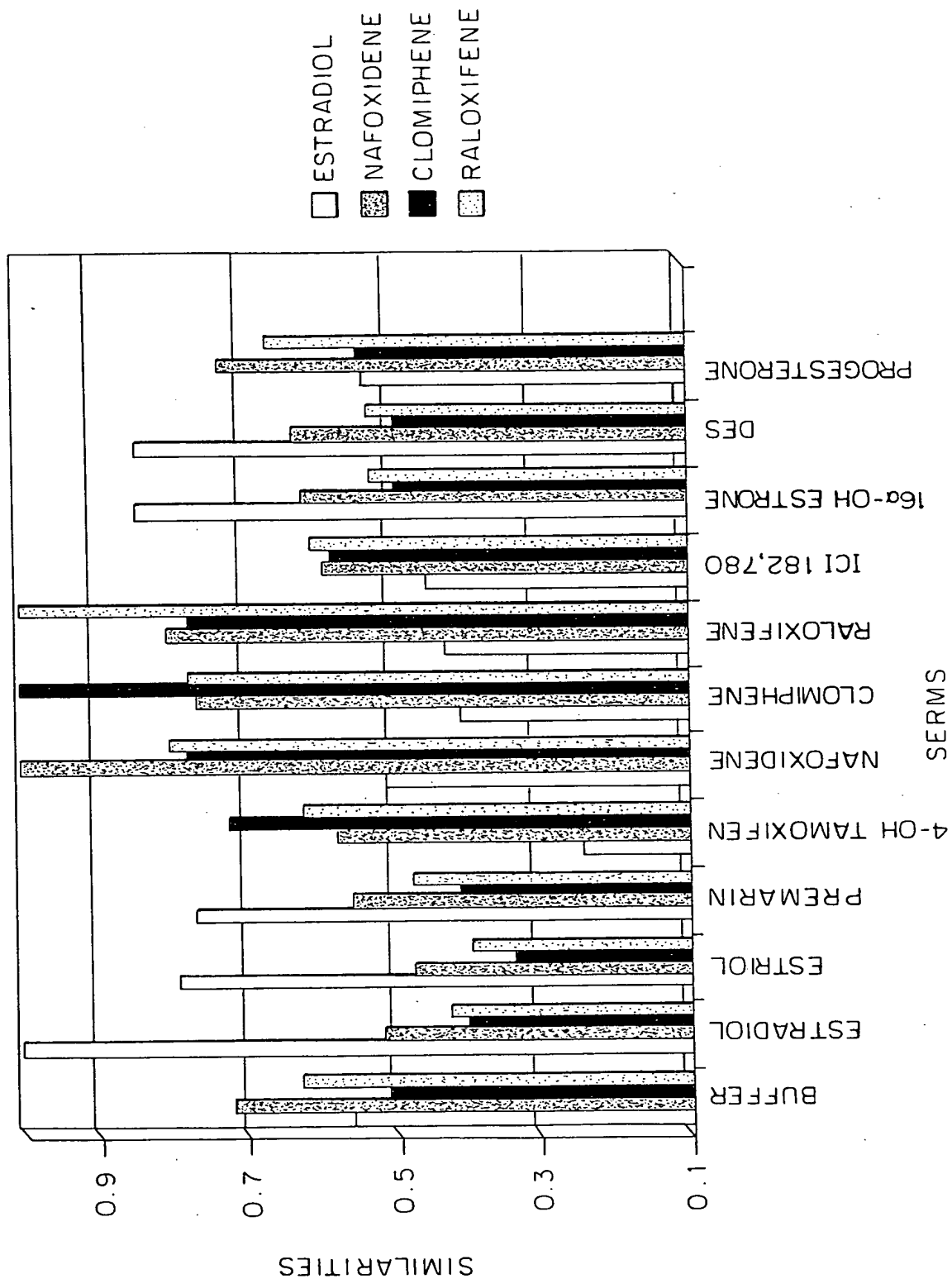




FIG. 8A

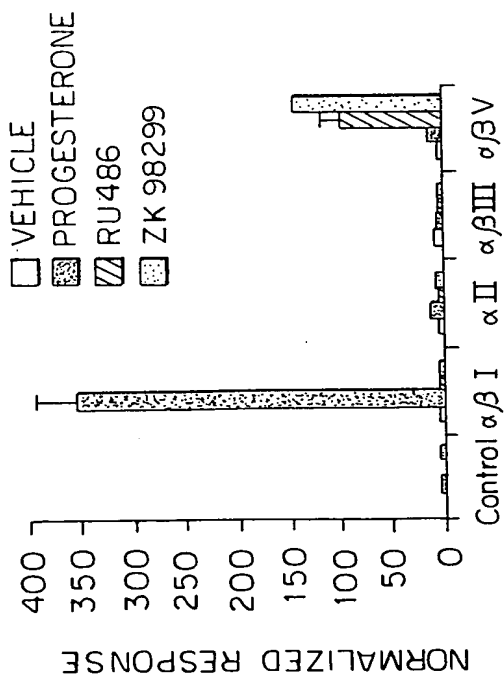


FIG. 8B

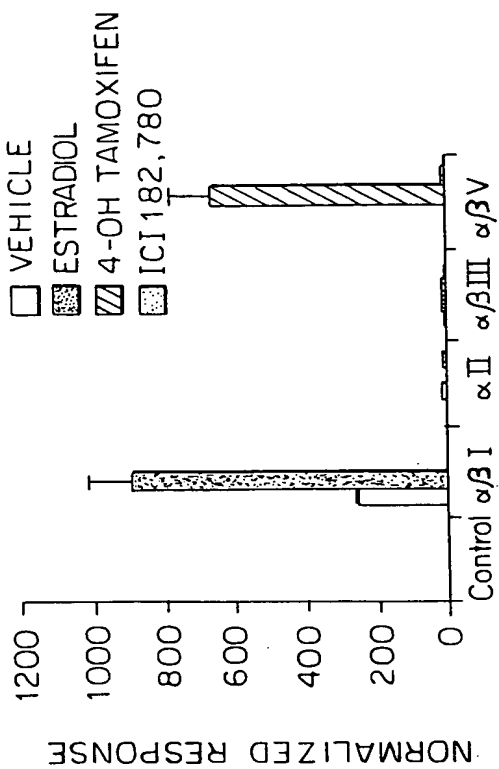


FIG. 8C

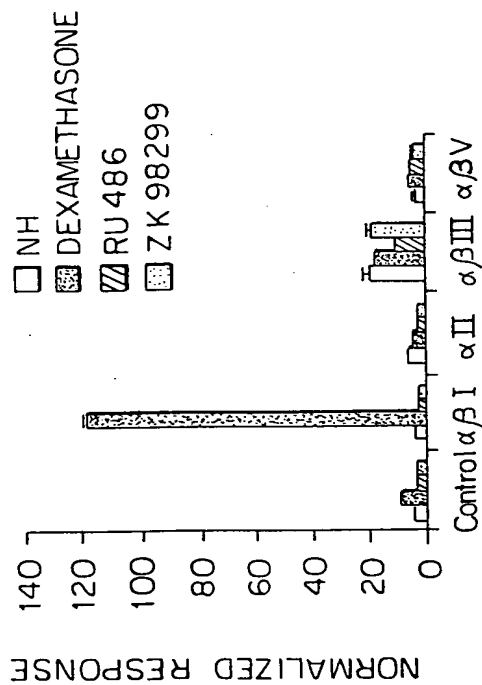
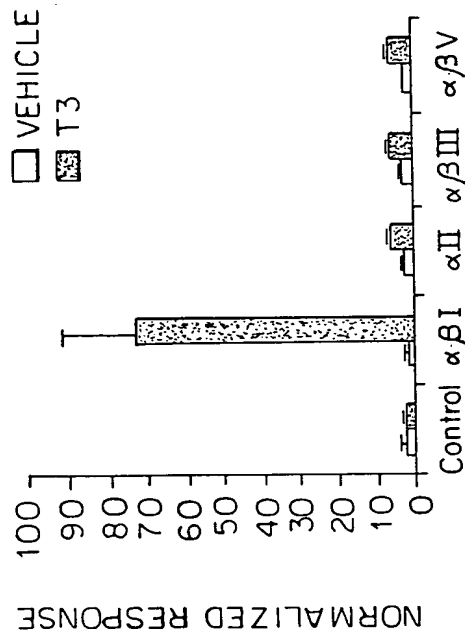


FIG. 8D



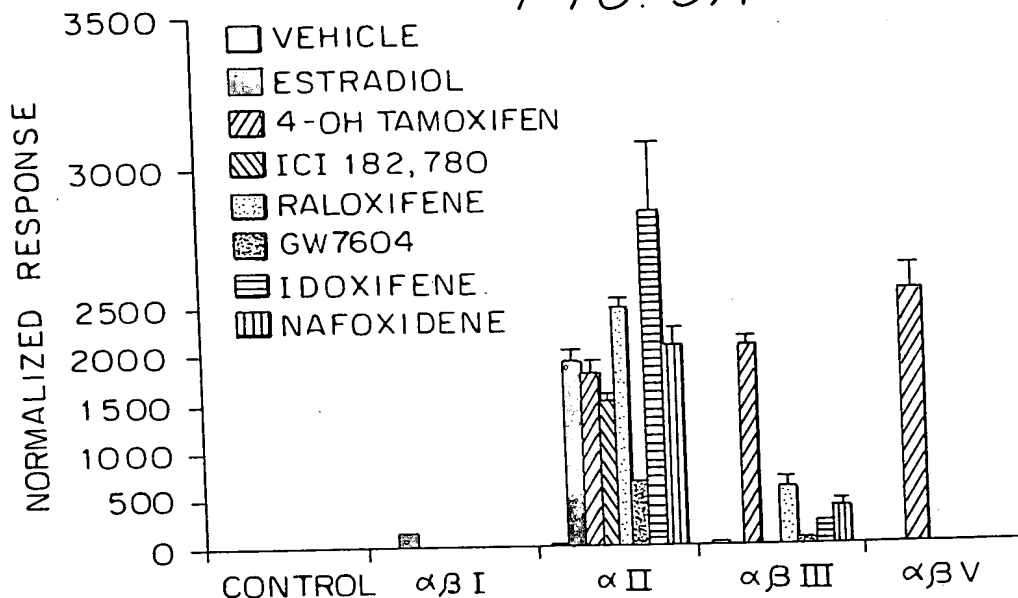
[illegible]

FIG. 9B

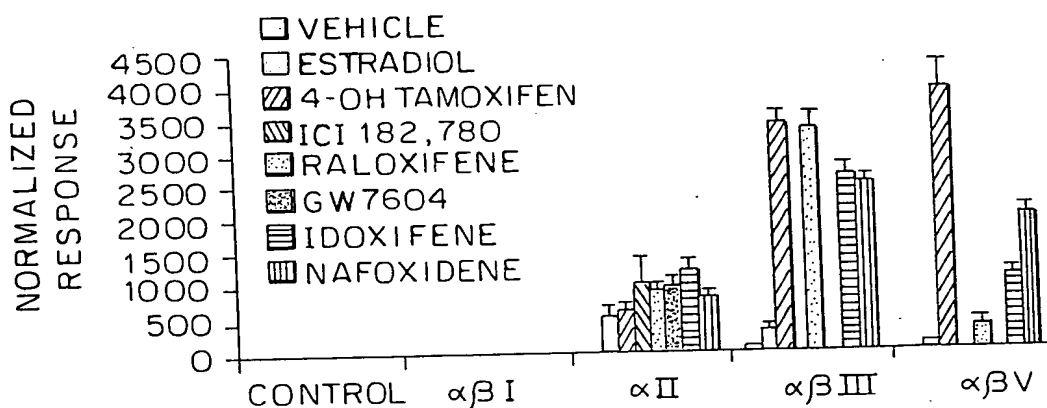


FIG. 9C

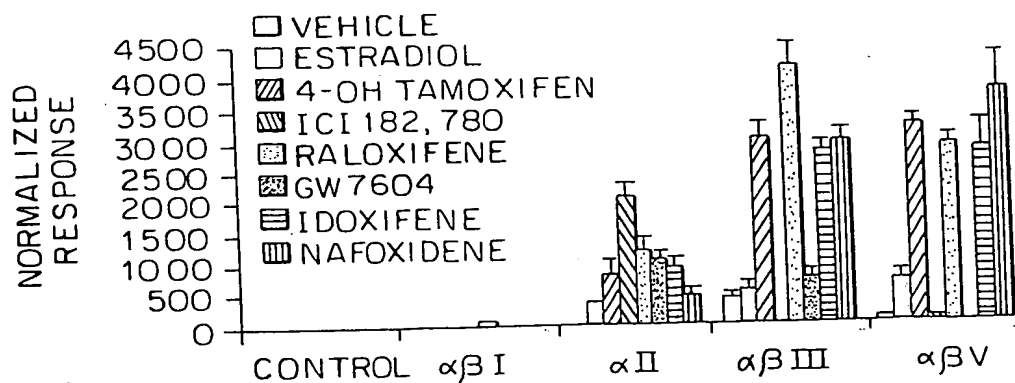


FIG. 10A

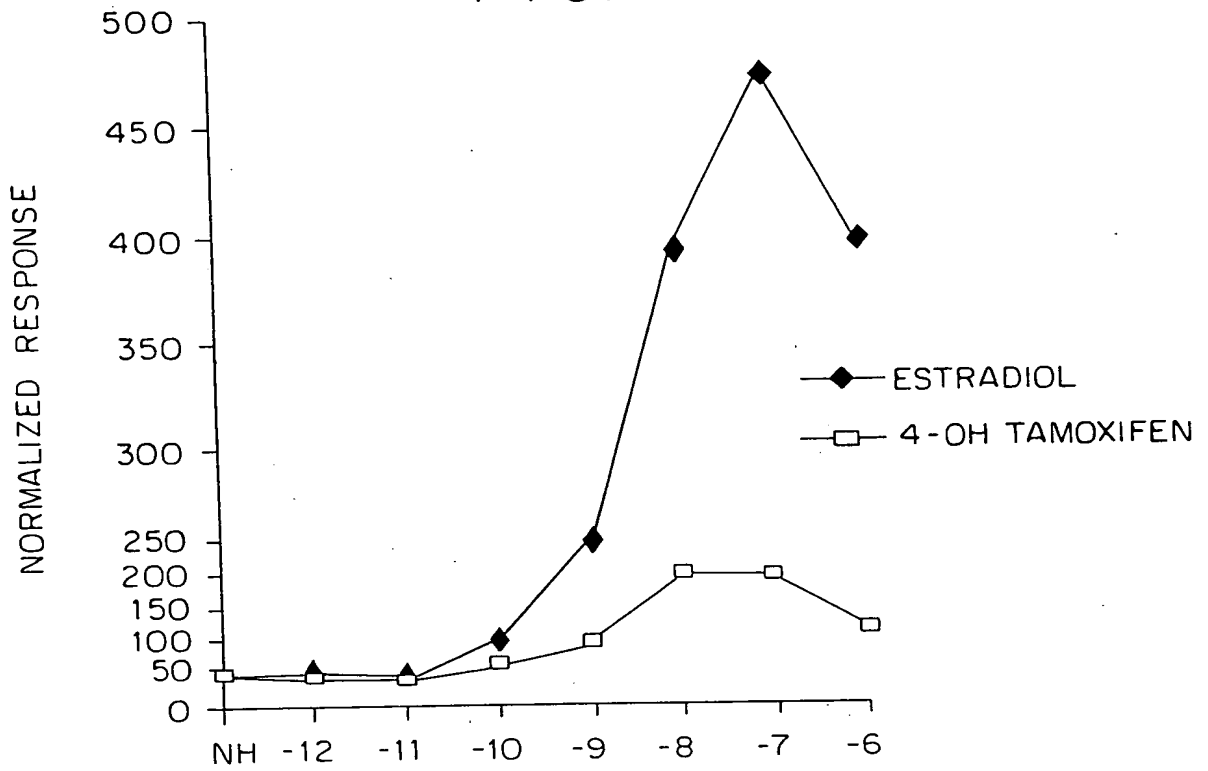


FIG. 10B

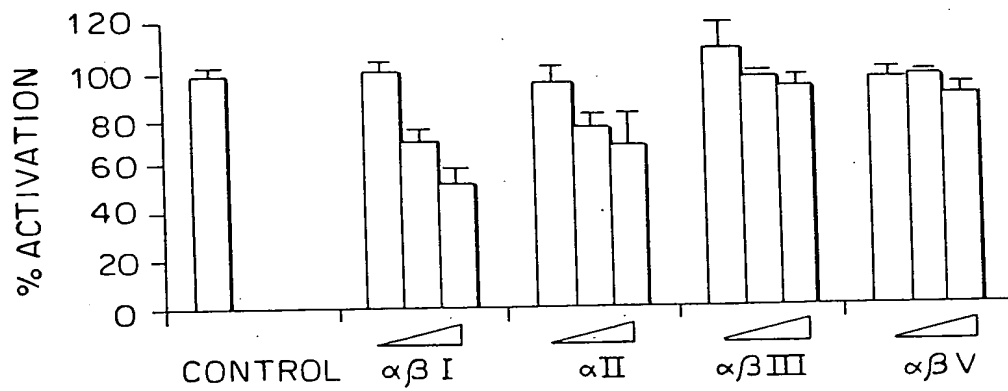


FIG. 10C

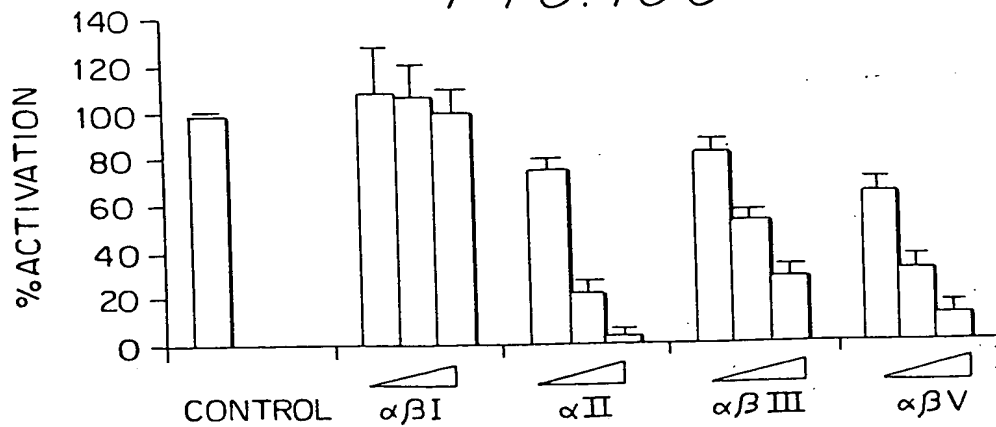


FIG. 11A

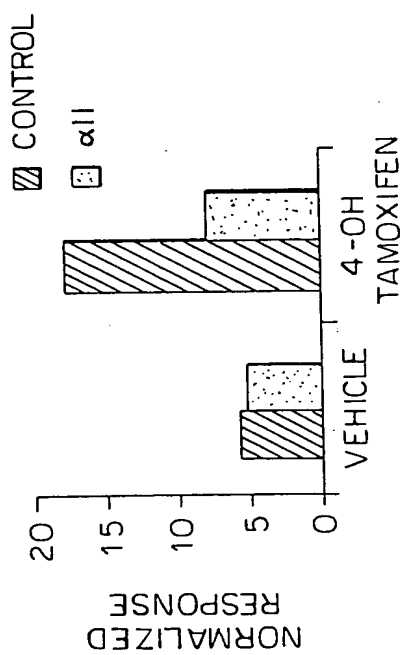


FIG. 11B

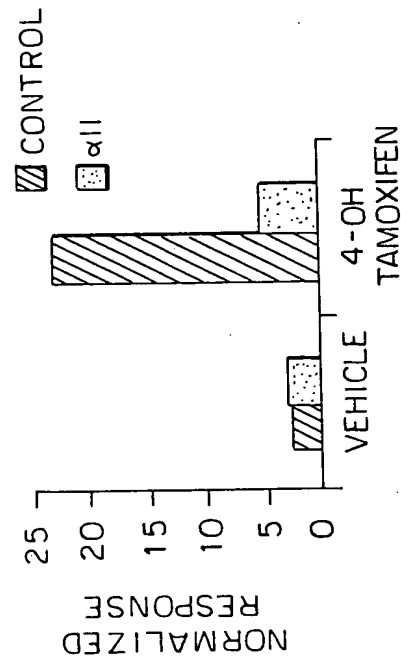


FIG. 11C

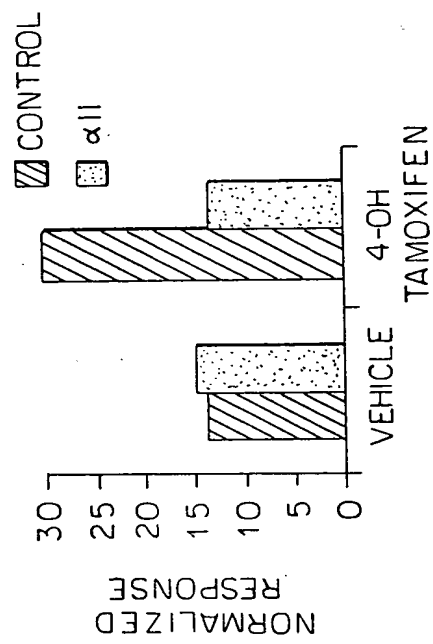


FIG. 11D

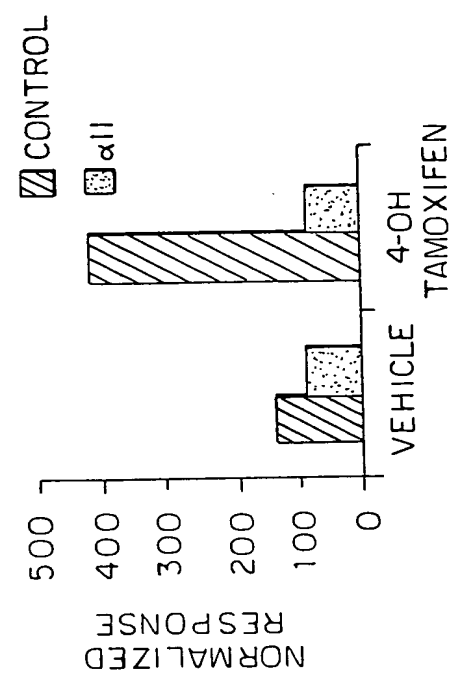




FIG. 12A

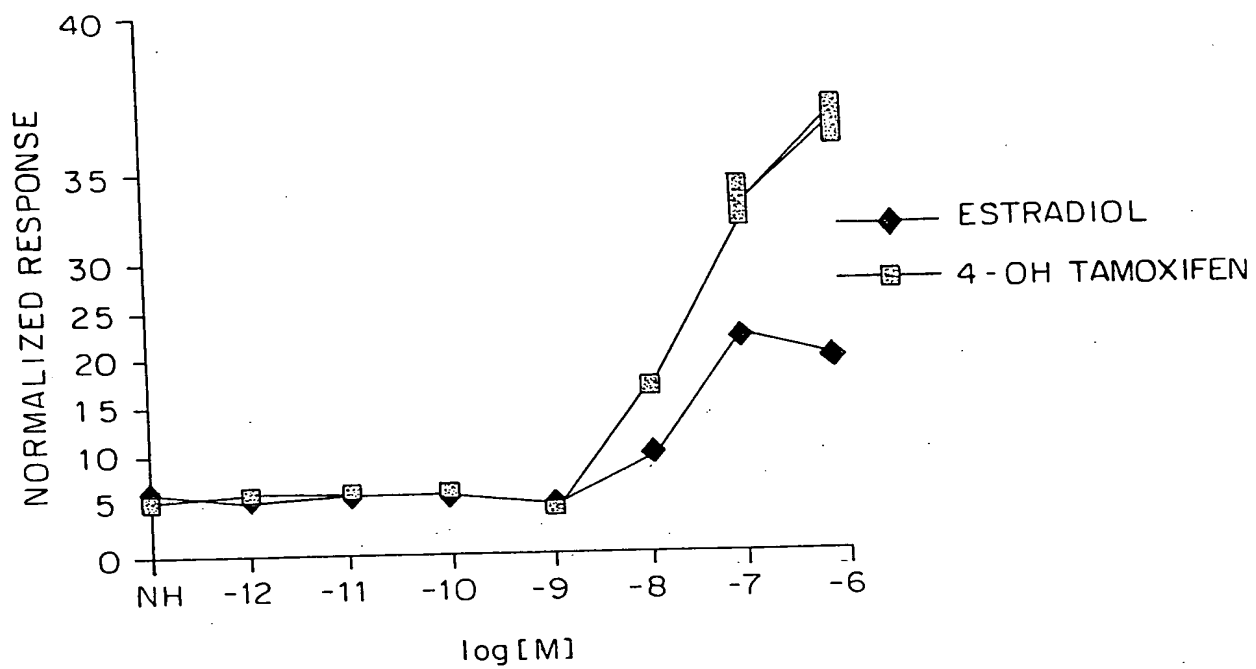


FIG. 12B

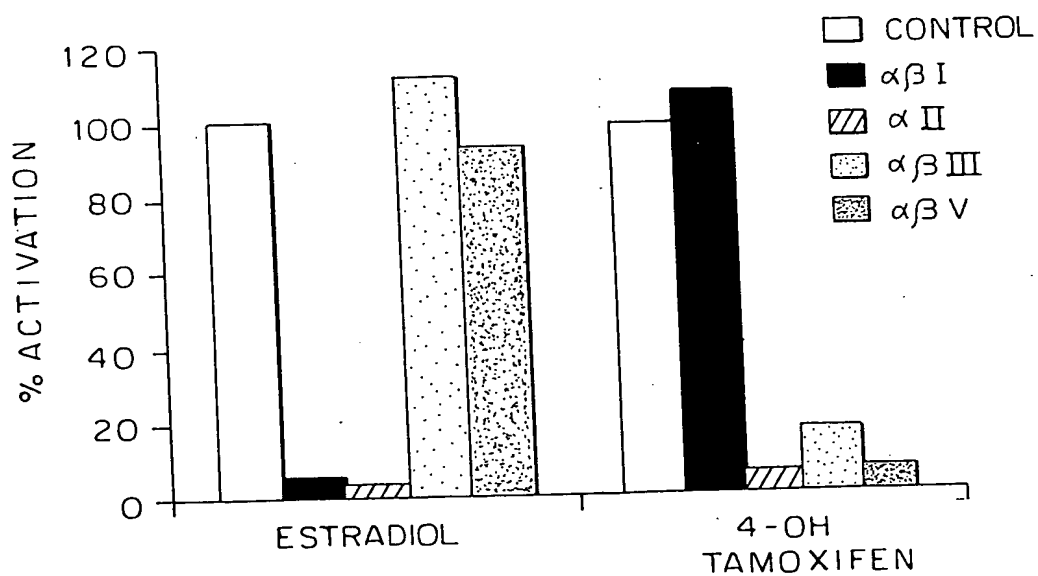


FIG. 13A

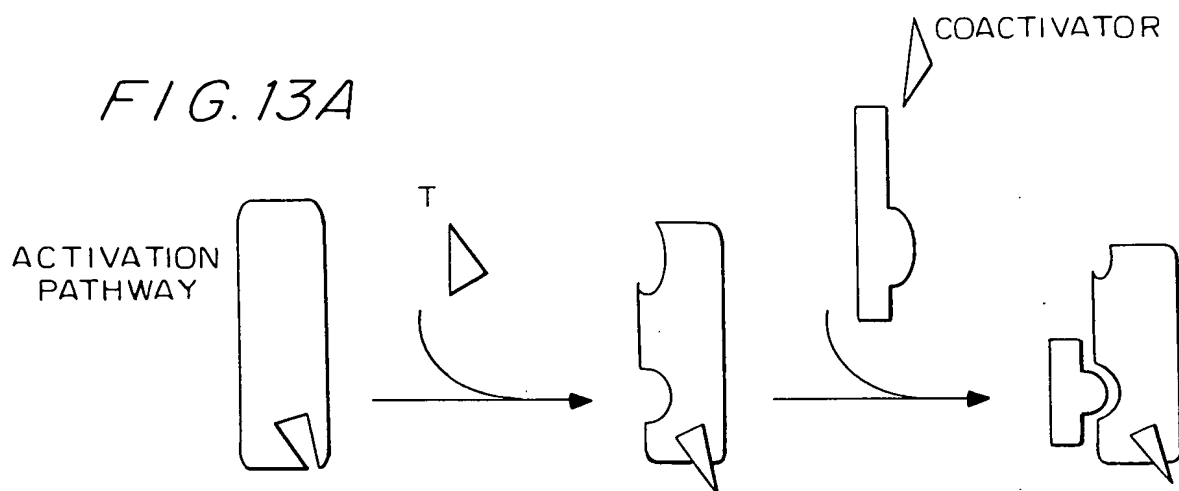


FIG. 13B

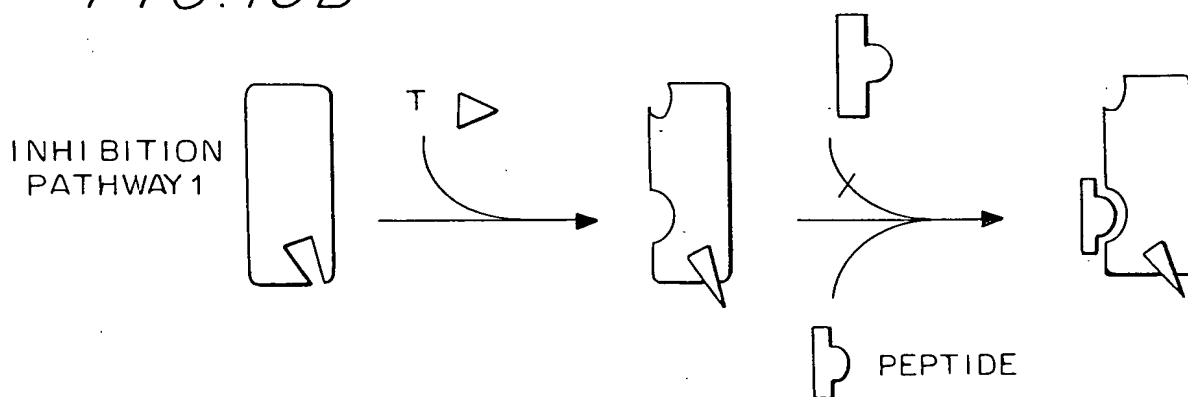


FIG. 13C

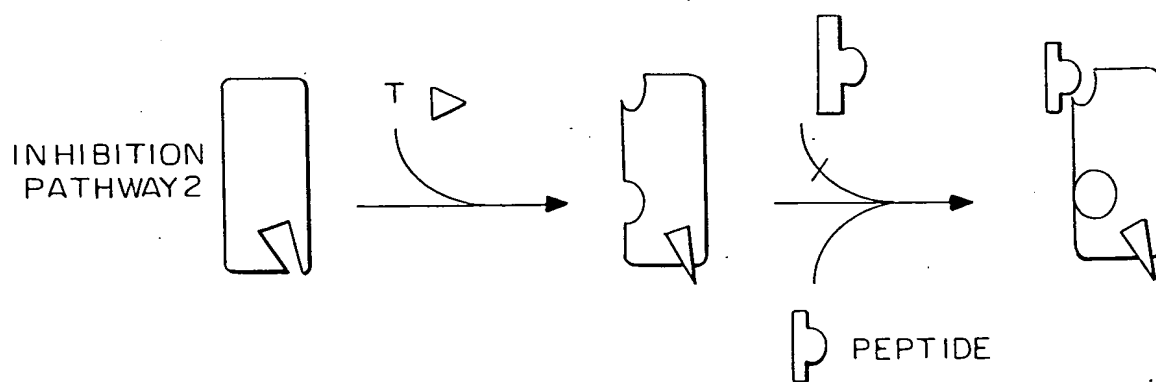


FIG. 14A

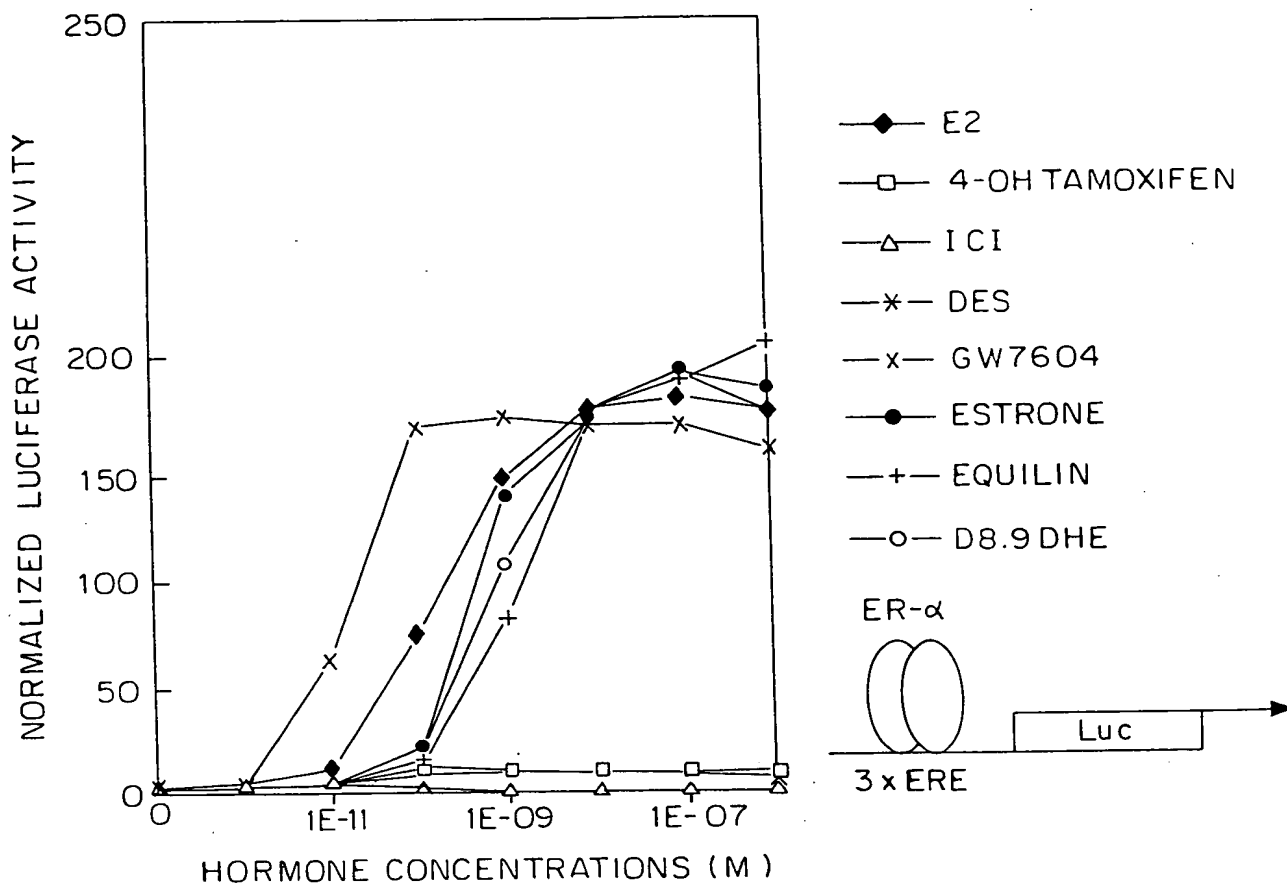


FIG. 14B

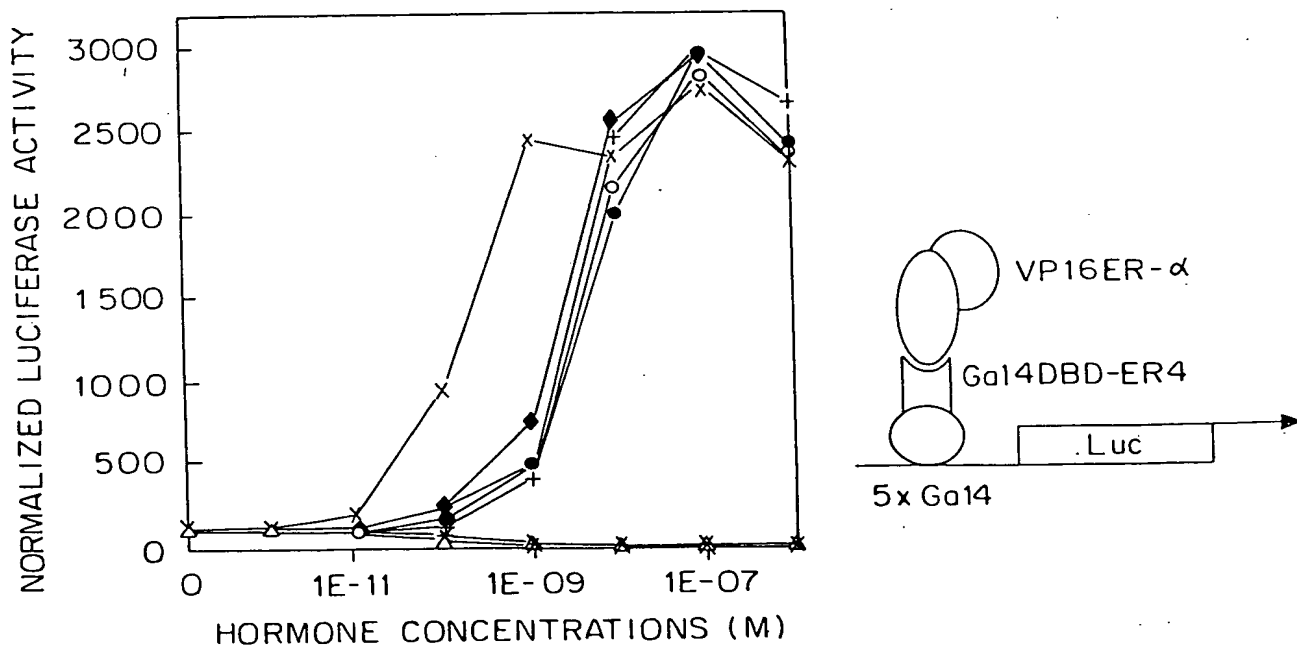


FIG. 14C

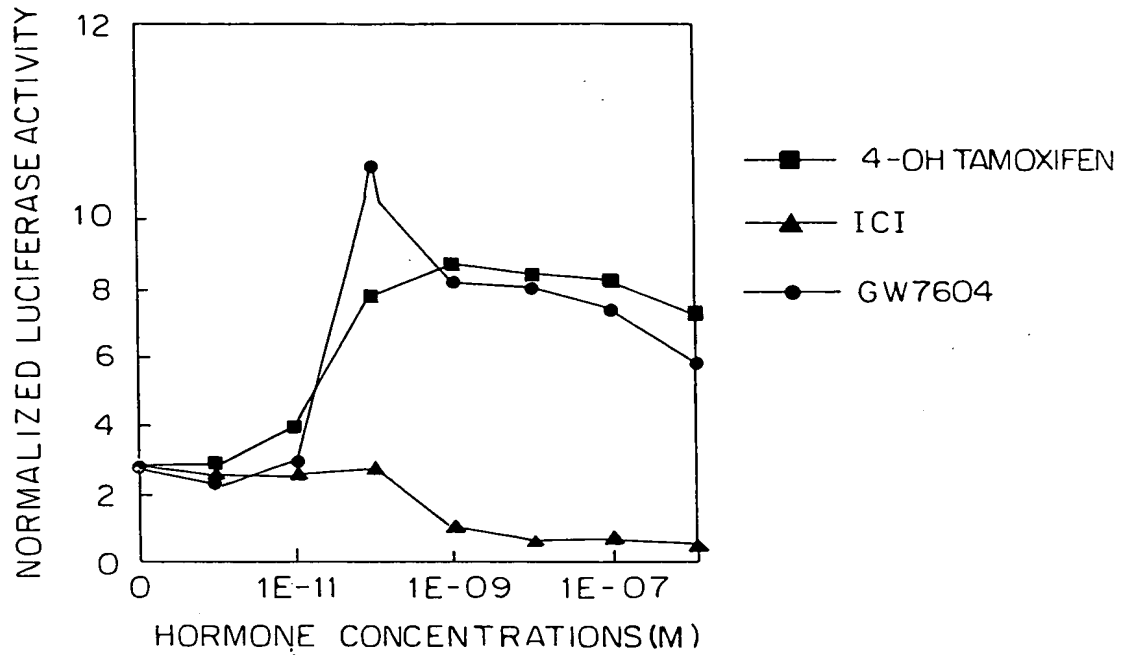


FIG. 14D

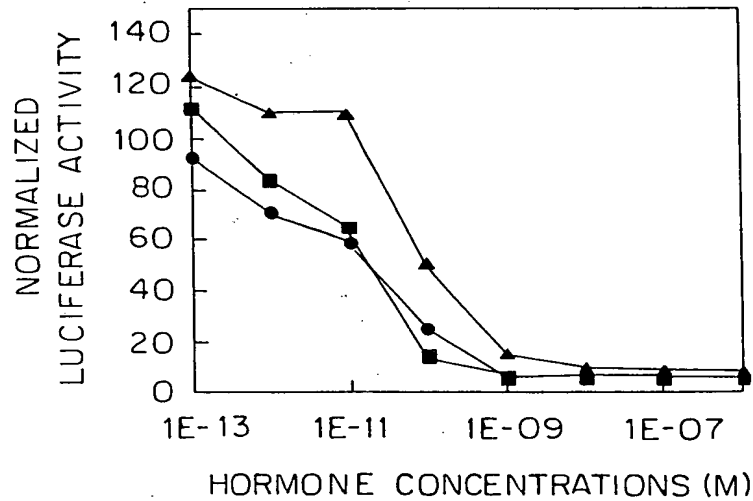


FIG. 15A

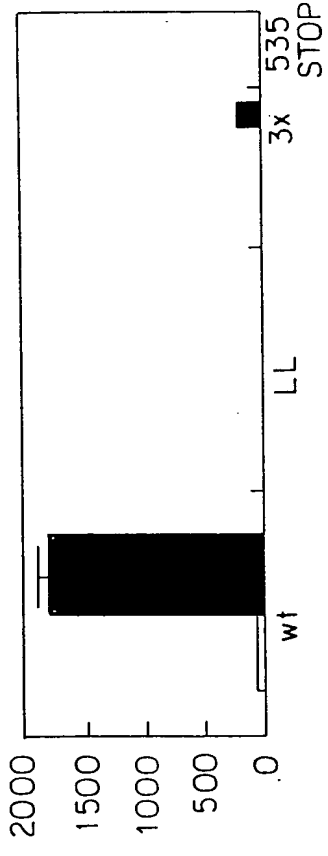


FIG. 15B

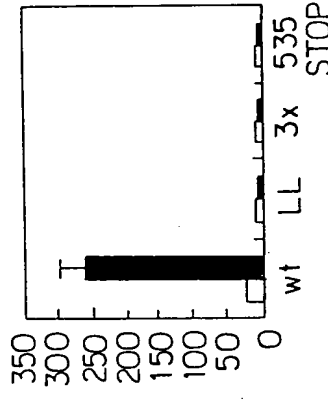


FIG. 15C

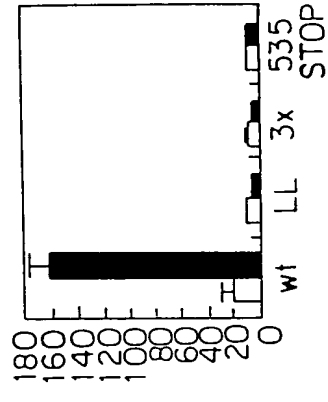


FIG. 15D

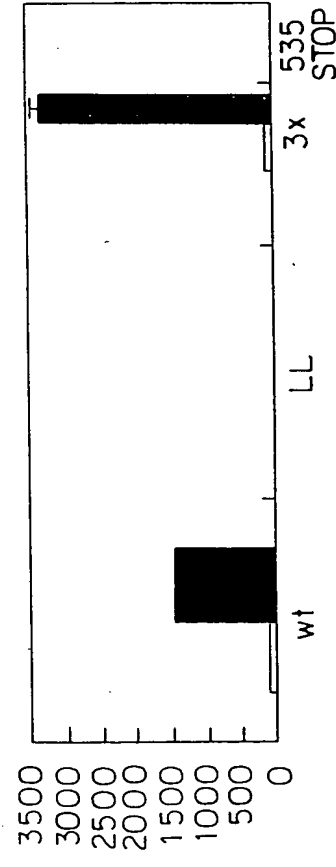


FIG. 15E

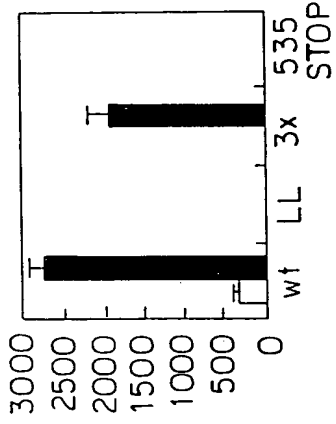


FIG. 15F

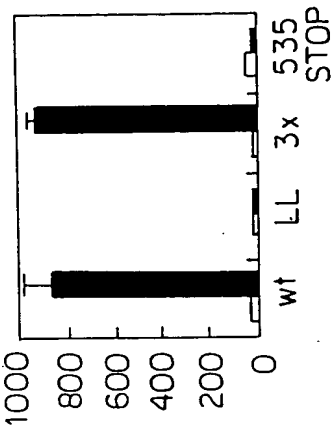


FIG. 15G

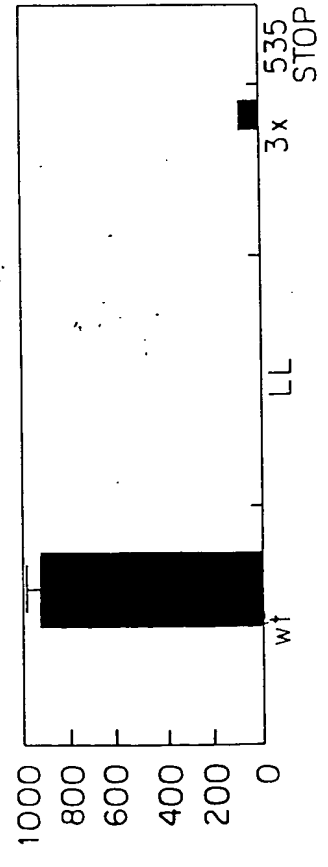
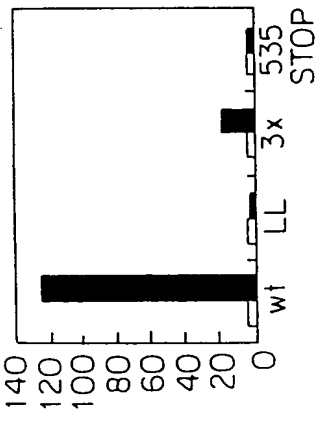


FIG. 15H



□ NO HORMONE  
■ 10<sup>-7</sup>M ESTRADIOL

FIG. 16A

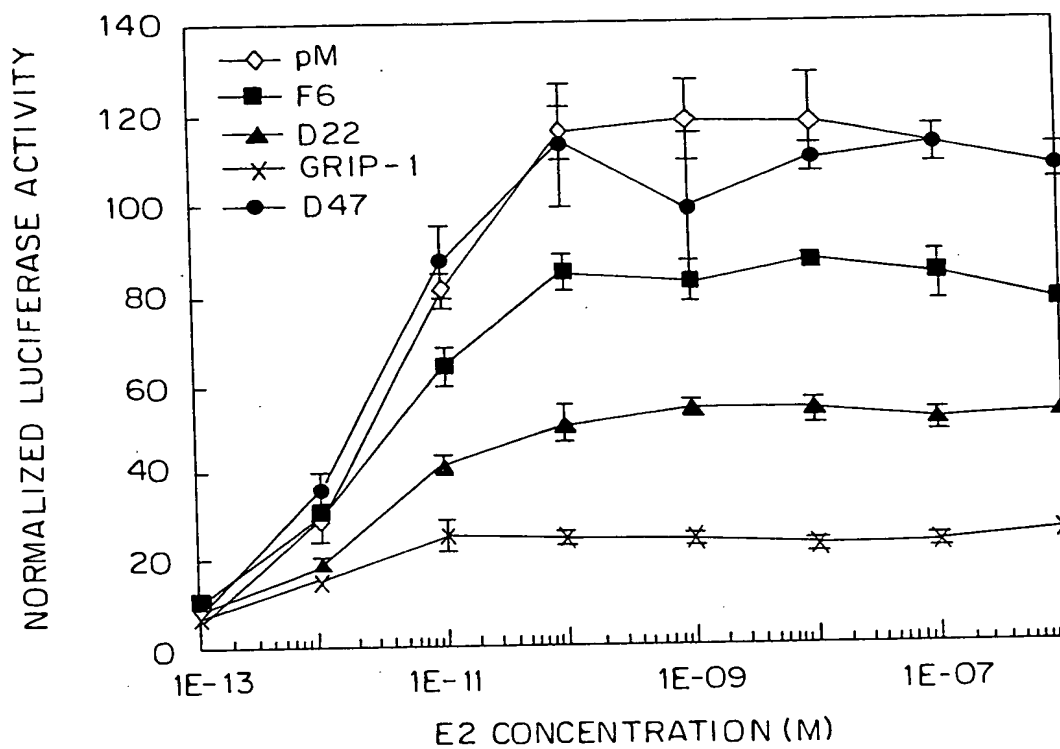


FIG. 16B

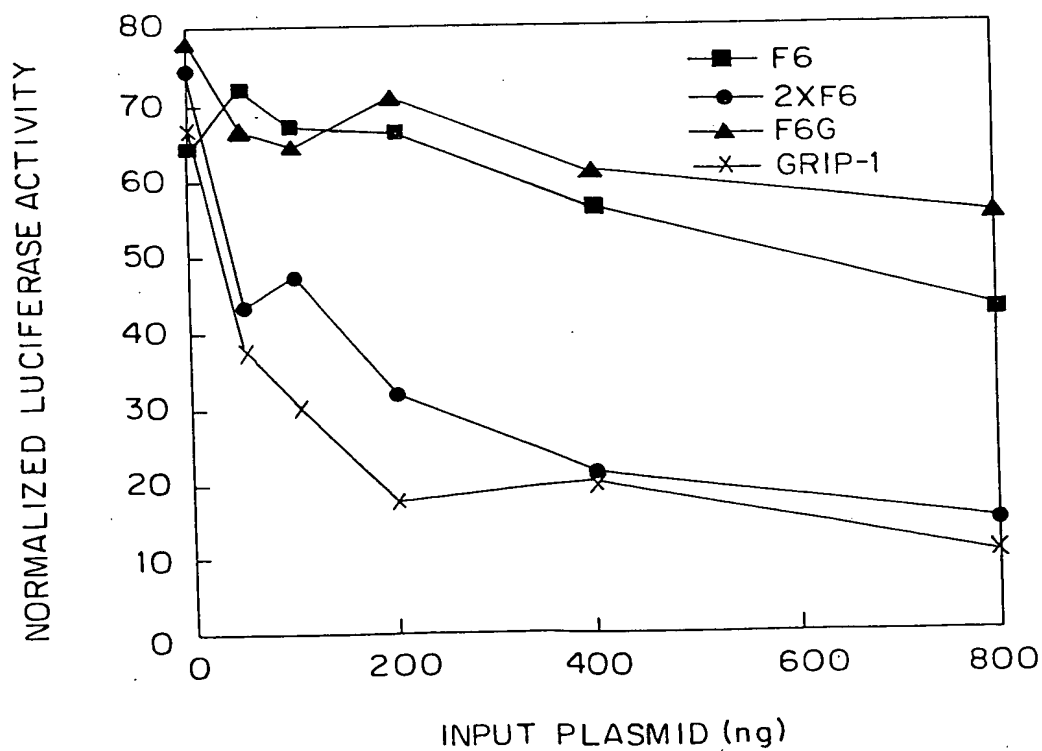


FIG. 17A

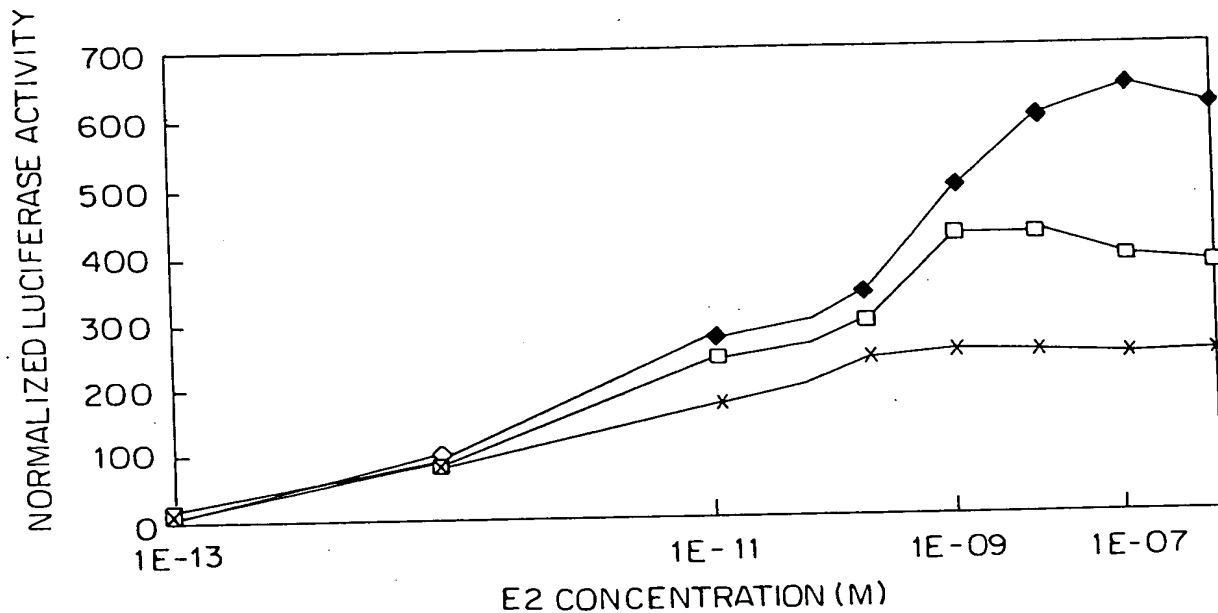


FIG. 17B

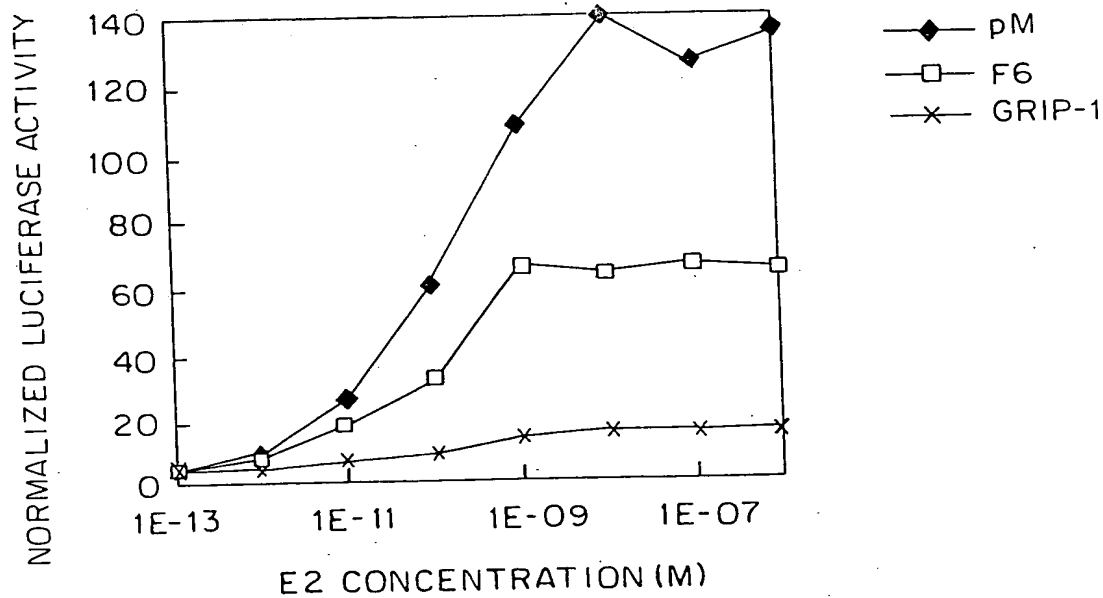


FIG. 17C

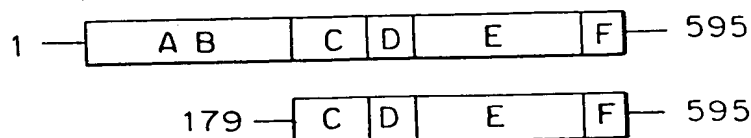


FIG. 18A

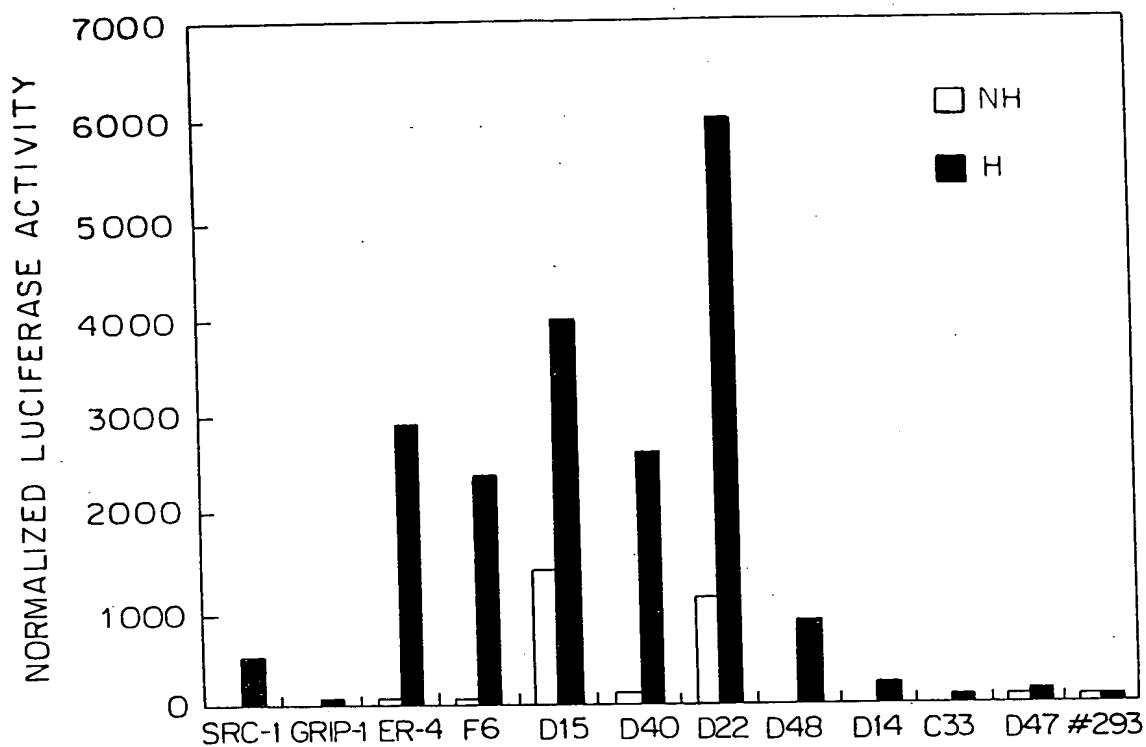


FIG. 18B

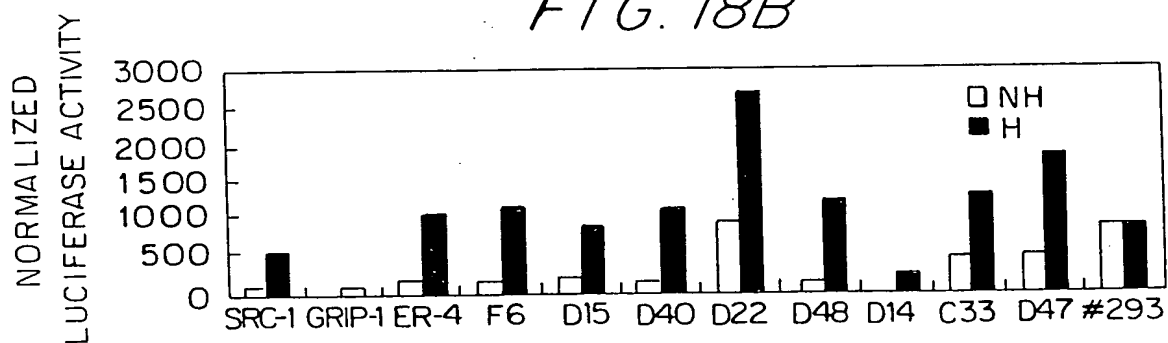


FIG. 18C

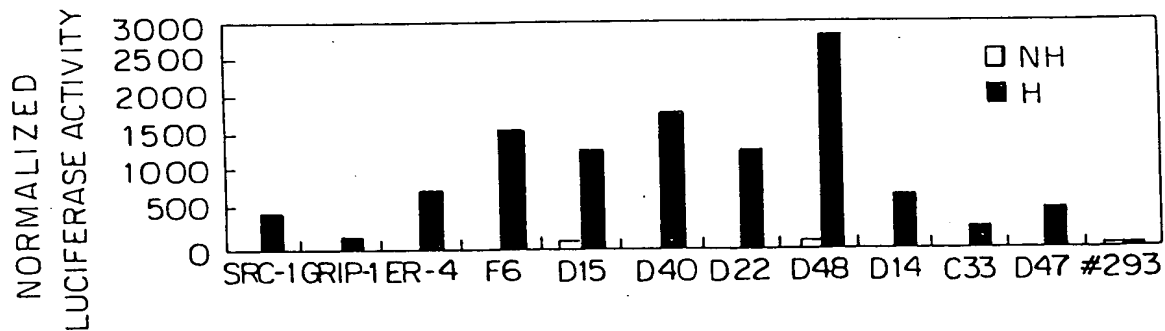




FIG. 18D

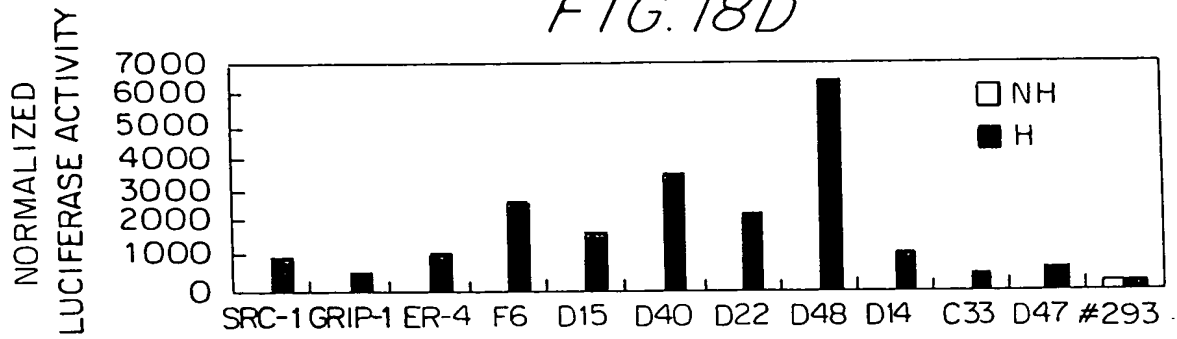


FIG. 18E

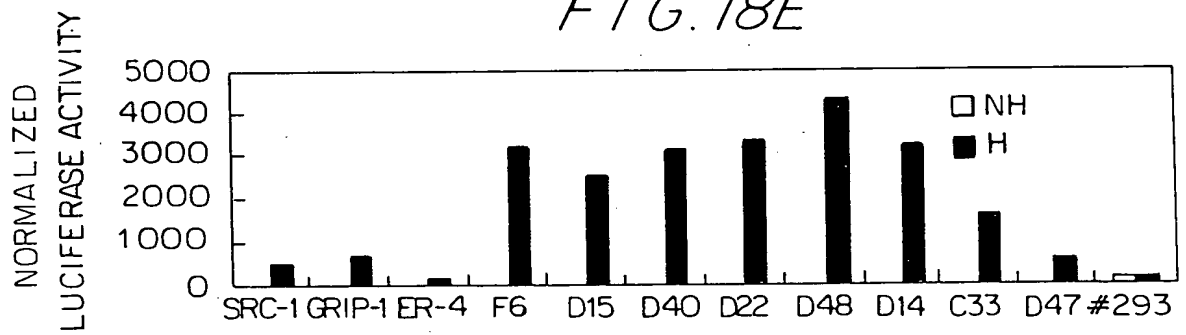


FIG. 18F

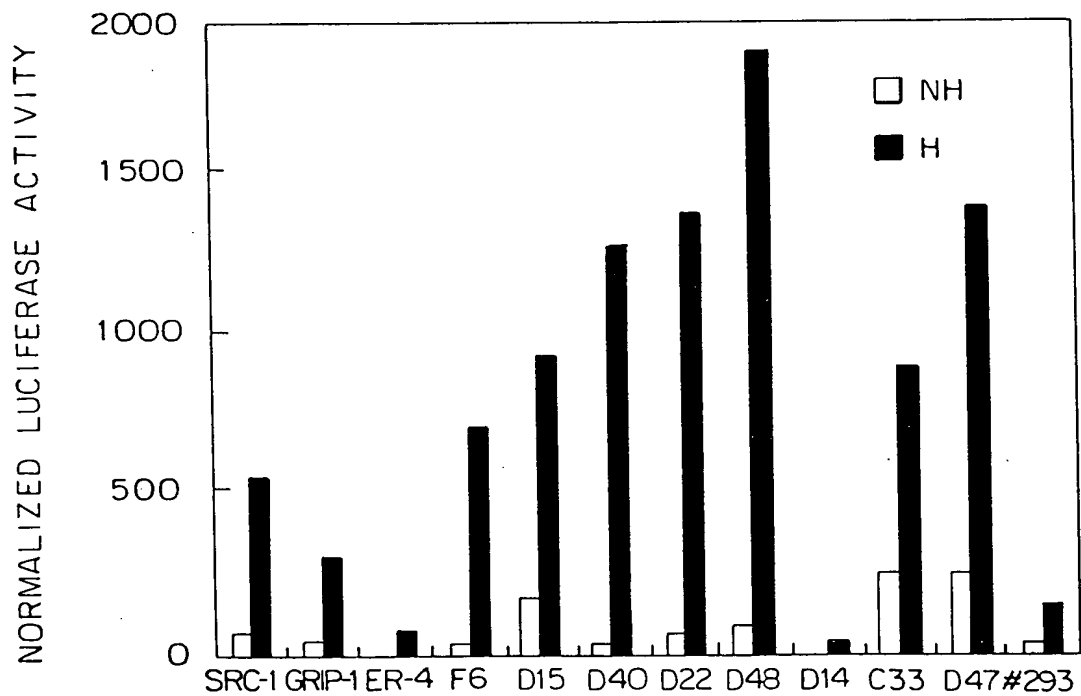


FIG. 18G

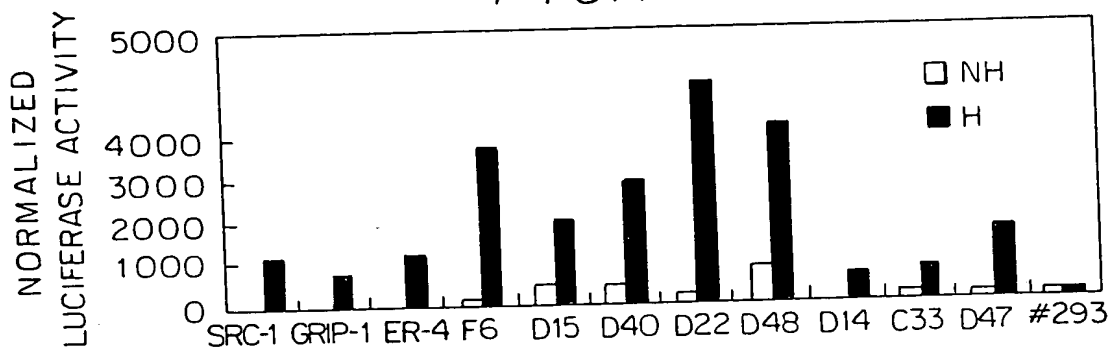


FIG. 18H

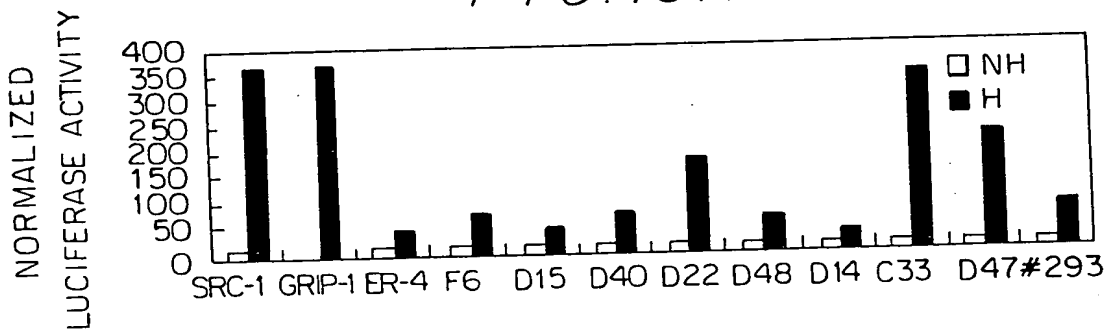


FIG. 18I

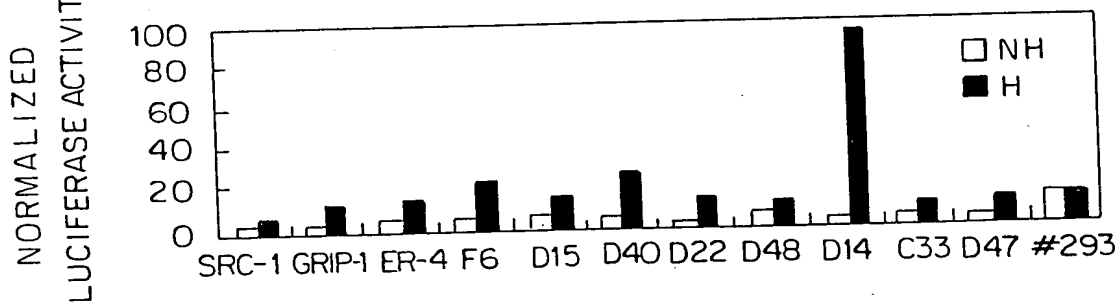


FIG. 18J

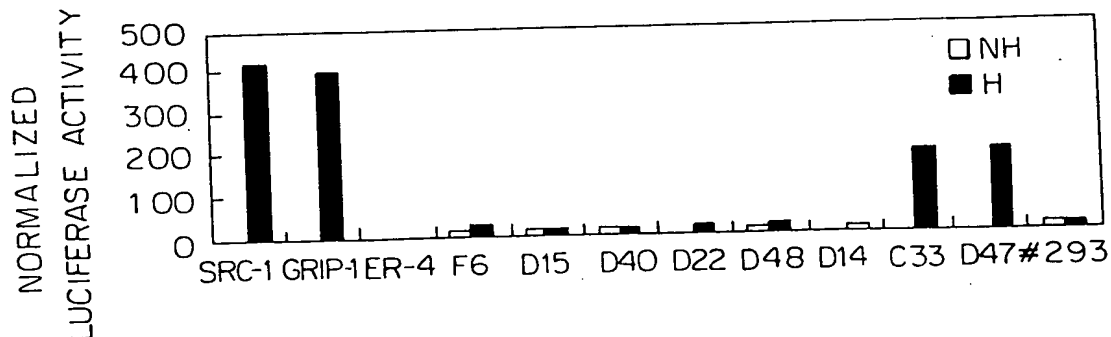
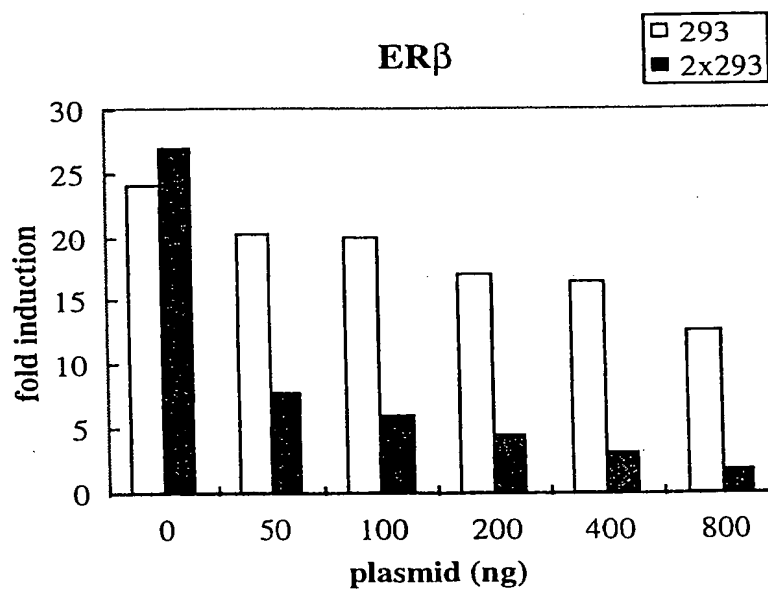
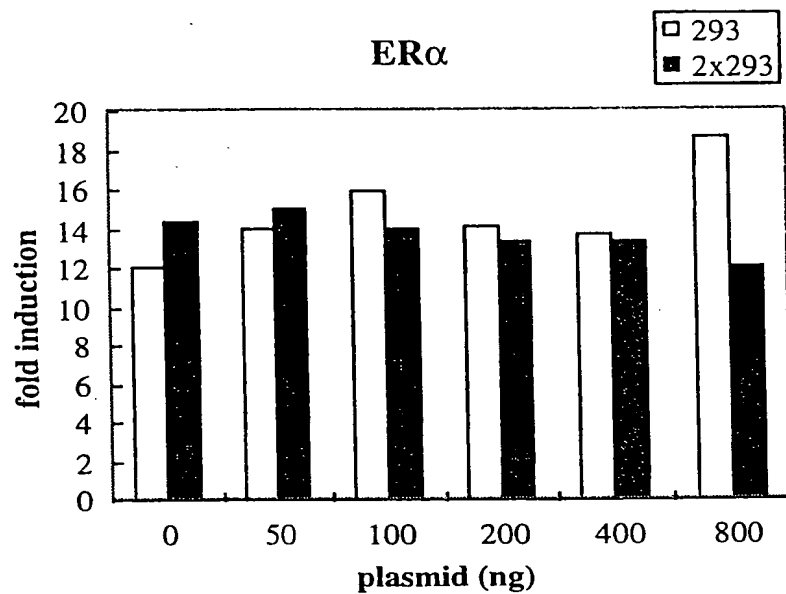


Fig. 19



20  
FIG. 12

	NH	E2	OT	ICI	Ralox	7604	Idox	Nafox
control	1.341	1.621	3.076	0.845	2.031	7604	2.294	2.053
AB1	293.5	5962	8.54	1.359	6.449	1.414	4.256	3.324
A2	752.3	4663	6821	507.3	5245	16.08	6925	7397
AB3	32.93	34.67	4696	33.15	56.18	4805	60.2	63.84
AB5	2.901	9.313	5837	7.16	5.059	64.21	21.75	8.434
						13.2		
NH dist	0	6886.618	9627.63	381.3001	4501.922	4062.318	6179.562	6651.107
E2 dist	6886.618	0	9787.266	7266.298	5983.961	5947.69	6372.767	6556.022
OT dist	9627.63	9787.266	0	9777.12	7617.299	7709.347	7437.648	7467.322
ICI dist	381.3001	7266.298	9777.12	0	4737.759	4297.842	6417.774	6889.769
Ralox dist	4501.922	5983.961	7617.299	4737.759	0	440.2544	1680.089	2152.019
7604 dist	4062.318	5947.69	7709.374	4297.842	440.2544	0	2120.054	2592.036
Idox dist	6179.562	6372.767	7437.648	6417.774	1680.089	2120.054	0	472.2028
Nafox dist	6651.107	6556.022	7467.322	6889.769	2152.019	2592.036	472.2028	0
NH sim	1.00	0.58	0.42	0.98	0.73	0.75	0.63	0.60
E2 sim	0.58	1.00	0.41	0.56	0.64	0.64	0.61	0.60
OT sim	0.42	0.41	1.00	0.41	0.54	0.53	0.55	0.55
ICI sim	0.98	0.56	0.41	1.00	0.71	0.74	0.61	0.58
Ralox sim	0.73	0.64	0.54	0.71	1.00	0.97	0.90	0.87
7604 sim	0.75	0.64	0.53	0.74	0.97	1.00	0.87	0.84
Idox sim	0.63	0.61	0.55	0.61	0.90	0.87	1.00	0.97
Nafox sim	0.60	0.60	0.55	0.58	0.87	0.84	0.97	1.00

II

Fig. 21

# AR

## Conformational Response Assay

